

PART IV.—MISCELLANEOUS.

MEDICAL.

REPORT OF THE PRINCIPAL CIVIL MEDICAL OFFICER AND INSPECTOR-GENERAL OF HOSPITALS FOR 1902.

I HAVE the honour to submit for the information of Government the Administration Report of the Medical Department for the year 1902, with the usual statistical tables.

I was granted nine months' leave from the 13th April, 1902. Dr. C. T. Griffin, the Assistant Principal Civil Medical Officer and Inspector-General of Hospitals, acted for me, and Dr. Ebell, Colonial Surgeon, acted for Dr. Griffin during this period.

I.—POPULATION: BIRTH- AND DEATH-RATES.

The estimated population of the Island on 31st December, 1902, was 3,685,267 (inclusive of the military and shipping population and the prisoners of war). 141,893 births were registered and 99,680 deaths. The birth-rate was 39.0 against 37.5, and the death-rate 27.4 against 27.6 per mille in the previous year, calculated on the estimated population in the middle of the year.

II.—PUBLIC HEALTH.

The public health during the past year has been on the whole good. There have been no widespread severe outbreaks of malaria; there have been a few outbreaks of cholera and smallpox, but these have been very moderate in severity and extent.

Malaria.—In the Western, Central, and North-Central Provinces malarial fevers were very slight. In the Northern Province the cases were more numerous than in the previous year, and the character of the fever was quotidian and tertian. This disease was most prevalent in the North-Western, Sabaragamuwa, and Eastern Provinces.

The relationship between malarial fevers and rainfall will be found in the accompanying charts, which have been prepared by A. J. Chalmers, M.D., F.R.C.S.

The people of the Island are becoming acquainted with the fact that malaria and mosquitoes are intimately associated, and they are being instructed as to the prevention of the disease by improved sanitation, &c.

Malaria in Colombo.—An attempt has been made during the year to find out where people primarily become infected with malaria in Colombo. There must be a number of errors in this attempt, but time will show these if the same plan adopted this year is carried out in following years. Primary malarial infection is prevalent in the wards in the following order:—

- (1) Pettah (with St. Paul's and St. Sebastian's).
- (2) New Bazaar.

Then a long drop in the numbers takes place, and then come—

- (3) Slave Island.
- (4) Kotahena.
- (5) Maradana.

Primary malaria is insignificant in—

- (6) Kollupitiya.
- (7) Fort.

Cholera.—There were 179 cases of cholera, with 116 deaths, during 1902; outbreaks occurred in the Western, Central, Northern, Southern, Uva, and North-Western Provinces. The greatest number occurred in the Western Province, which includes the Cooly Camp at Ragama. There were 74 cases, with 55 deaths, in this Province; 36 cases and 28 deaths in the Northern Province. The North-Western Province had 29 cases and 16 deaths; the Central Province 22 cases, with 12 deaths; the Southern Province 21 cases, with 4 deaths; and in the Province of Uva there were 2 cases, with 1 death.

The establishment of the Ragama Camp for coolies has been of great benefit towards reducing the outbreaks of cholera and other infectious diseases in various parts of the Island. In nearly every outbreak of cholera during the year infection could be traced to India.

The subjoined table shows the Provinces in which outbreaks occurred, the number of cases attacked, the number of those who died, with their nationality :—

Province.	No. of Cases and Deaths.		Nationality.													
			Sinhalese.		Moora.		Tamils.		Malays.		Immigrants.		Other.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Western ...	74	55	42	32	4	3	4	4	—	—	22	15	2	1	74	55
Northern ...	36	28	—	—	—	—	36	28	—	—	—	—	—	—	36	28
North-Western ...	24	16	9	3	4	3	11	10	—	—	—	—	—	—	24	16
Central ...	22	12	—	—	—	—	22	12	—	—	—	—	—	—	22	12
Southern ...	21	4	21	4	—	—	—	—	—	—	—	—	—	—	21	4
Uva ...	2	1	—	—	—	—	—	—	—	—	2	1	—	—	2	1
Total ...	179	116	72	39	8	6	73	54	—	—	24	16	2	1	179	116

Smallpox.—There were 146 cases of this disease, with 35 deaths ; they occurred in the Western, Southern, North-Western, and Northern Provinces. In the Western Province 2 cases were remaining at the end of the year 1901 in the Infectious Diseases Hospital, Kanatta, and 118 cases were admitted in 1902, making a total of 120 cases, with 32 deaths. Two of these were cases from ships. The other cases were from Negombo and Moratuwa. In the Southern Province there were 19 cases, with 3 deaths ; in the North-Western Province 3 cases ; and in the Northern Province 2 cases. The Central, North-Central, Eastern, Uva, and Sabaragamuwa Provinces were free from smallpox during the year.

Chickenpox.—There were 2,293 cases of this disease, with 3 deaths, reported from various parts of the Island, distributed as follows :—

	Cases.	Deaths.		Cases.	Deaths.
Western Province ...	1,057	3	Southern Province ...	222	—
Province of Sabaragamuwa ...	238	—	North-Western Province ...	21	—
Province of Uva ...	73	—	Northern Province ...	13	—
Eastern Province ...	17	—			
North-Central Province ...	3	—	Total ...	2,293	3
Central Province ...	649	—			

Most of these cases were treated in their own homes, but in towns where an infectious diseases hospital exists many of the cases were moved there.

Measles.—This disease did not assume any alarming proportions in any of the towns or villages.

Dysentery.—This disease was fairly equally distributed throughout the Island. In the Central, Western, and Sabaragamuwa Provinces it was most prevalent. In the Northern Province the numbers attacked were slightly in excess of the previous year. In the Eastern Province the prevalence was not marked, but it was present throughout the year. In the Province of Uva the cases were comparatively few. The total number of cases treated in all hospitals was 3,017, with 999 deaths. The largest number treated in any one institution was at the General Hospital, Colombo, where 488 cases were admitted, of whom 89 died.

Enteric Fever.—The number of cases treated in the various hospitals throughout the Island was 242, with 63 deaths. The General Hospital, Colombo, admitted 133 cases, of whom 32 died. Some improvement has been made in the number of cases notified. This remark applies especially to Colombo, owing to the attention of the public having been drawn to the law by advertisement in the *Gazette* and local Press ; still I have no doubt very many cases occurred, of the existence of which the authorities had no knowledge.

Causation of Enteric Fever.—Many of the cases are landed from the port. Pollution of water and milk are the commonest causes of this disease here. The cesspit system, which exists in some of the large towns, notably Colombo, Kandy, and Galle, has much influence on increasing the number of cases.

Leprosy.—The total number of cases reported during the year 1902 was 560, against 590 in the previous year, being a decrease of 30 cases.

Return of Lepers treated as Outdoor Patients in the Hospitals and Dispensaries during the Years 1901 and 1902.

	1901.	1902.		1901.	1902.
Western Province ...	48	32	North-Central Province ...	—	—
Central Province ...	6	28	Province of Uva ...	7	4
Northern Province ...	6	9	Province of Sabaragamuwa ...	10	40
Southern Province ...	19	29			
Eastern Province ...	37	6	Total ...	135	148
North-Western Province ...	2	—			

382 cases were treated in the Leper Asylum, Hendala, and 30 in the Kalmunai wards. The new cases came from the following places :—

	New Cases.		New Cases.
Western Province ...	37	Province of Sabaragamuwa ...	3
Central Province ...	2	Mauritius ...	1
Southern Province ...	8		
Southern India ...	6	Total ...	59
Province of Uva ...	2		

The Western Province, which includes the Colombo District, shows the largest number of cases, but this may be due to the proximity of the Asylum for the residents.

The Leper Ordinance came into operation at the beginning of this year, and 113 cases have been reported. Many of them have been accommodated in the Hendala Asylum; a few have been isolated in their own homes, where the conditions existed which allowed this. Dr. Meier, the Superintendent at Hendala, in his report remarks on the smaller number of admissions to the Asylum this year as compared with previous years, and he considers this is due to the Ordinance. In former years patients voluntarily sought admission, whereas now they avoid, if possible, being sent; they prefer their liberty to a lifelong residence in the Asylum.

Dr. Van Houten of the Dutch Ambulance, a prisoner of war, worked on the subject of leprosy during the year, and published some valuable scientific results. He isolated a bacillus which he cultivated outside the human body.

Anchylostomiasis.—This disease is constantly being introduced from India by Malabar coolies, and is spread broadcast owing to the careless habits of the cooly, who pollutes the soil and water with his excreta. This disease is on the increase. There were 1,609 admissions in all hospitals, with 257 deaths. The largest number was treated in the Colombo Hospital, viz., 702 admissions, with 47 deaths. A large number of cases occurs in the planting districts. The danger of the disease exists in the profound anæmia, which so lowers the vitality that the victim is carried off by practically any intercurrent complaint. I am inclined to regard a part at least of the increase in the reported cases of anchylostomiasis to the fact that the disease is recognized now, while only a few years ago it would probably have been regarded as anæmia consequent on malarial fever.

Parangi.—From the hospital returns it would appear that the number of admissions for this disease has steadily increased during the last five years, but not in proportion to the increase of the population, so that the number affected in ratio to the inhabitants is becoming less every year. As food becomes more easily obtainable with the extension of irrigation, and as sanitary methods become more generally known, this disease will show a marked decrease. The death-rate is remarkably small: out of 3,434 admissions for this disease during the year there were only 10 deaths.

I attach herewith a return of the principal diseases for the last five years for purposes of comparison:—

Comparative Statement of Principal Diseases for the last Five Years.

		Cases.	Deaths.			Cases.	Deaths.
<i>Cholera.</i>				<i>Enteric Fever.</i>			
1898	...	533	320	1898	...	161	52
1899	...	—	—	1899	...	170	61
1900	...	814	456	1900	...	224	77
1901	...	152	97	1901	...	292	74
1902	...	179	116	1902	...	243	63
<i>Smallpox.</i>				<i>Leprosy.</i>			
1898	...	14	3	1898	...	528	51
1899	...	334	56	1899	...	506	53
1900	...	252	42	1900	...	635	43
1901	...	390	75	1901	...	518	56
1902	...	146	35	1902	...	483	48
<i>Chickenpox.</i>				<i>Anchylostomiasis.</i>			
1898	...	84	—	1898	...	1,201	212
1899	...	1,211	1	1899	...	1,255	234
1900	...	935	—	1900	...	1,336	273
1901	...	1,762	6	1901	...	1,691	326
1902	...	2,293	3	1902	...	1,609	257
<i>Measles.</i>				<i>Parangi.</i>			
1898	...	45	1	1898	...	3,267	14
1899	...	29	1	1899	...	3,080	10
1900	...	23	—	1900	...	3,646	9
1901	...	44	—	1901	...	3,117	12
1902	...	196	2	1902	...	3,434	10
<i>Dysentery.</i>				<i>Malarial Fever.</i>			
1898	...	2,774	1,034	1898	...	6,097	299
1899	...	2,639	930	1899	...	8,305	697
1900	...	3,204	934	1900	...	6,226	147
1901	...	4,177	1,543	1901	...	5,665	89
1902	...	3,017	999	1902	...	6,513	115

NOTE.—Cases of these diseases at Boer Camps not included.

METEOROLOGICAL CONDITIONS AND THEIR RELATIONSHIP TO MALARIA.

This is the third year during which a series of charts has been prepared to illustrate the relationship between malaria and the rainfall. The report for 1900 contains curves which, though illustrating the general truth of the relationship, yet could hardly be considered as very satisfactory, owing to the small number of figures available for the curves. The report for 1901; however, contains curves which were considered to be approximately accurate.

The Island has again been roughly divided into eastern and western portions, affected by the north-east and south-west monsoons respectively. The charts show the curves of the numbers of total diseases and malaria and the average rainfall. The subject may be considered under two heads—

- (a) The malaria in the west.
- (b) The malaria in the east.

(a) *The Malaria in the West.*—Chart I. shows the curve of total diseases in the western portion of Ceylon. It will be noticed that there are two maxima, one in January and the other in May; and two minima, one in February and the other in October and November. In most details this curve corresponds with last year, with the exception that the one which should begin in October is deferred till December.

Chart II. shows the curve of malaria in the west. Its maximum is in January, and after a slight rise in April it falls to a minimum in October and November. Comparing this with last year a general similarity can be noted, but the minimum is deferred from September to October, and the rise only begins in December instead of in October.

Chart III. shows the total rainfall from a number of stations in the west, represented as the mean rainfall and not in the aggregate.

The average rainfall is considerably greater than last year, and the great maximum is in October instead of November, though the rainfall in November and even in December is much more than last year's: *e.g.*, in November, 1901, the rainfall was over 11, while in 1902 it is over 40; in December, 1901, it was over 6.6, while in 1902 it is over 20.

The reason of the usual rise of the malarial curve directly after the rain is probably due to the old cases of malaria getting fever from the chills; and the great rise in January, about four to eight weeks after the usual rise of the rainfall in November, is due to the fact that the land after the rain is covered with water; therefore the mosquitoes abound and multiply, and finding the parasite in numbers in the old cases, spread malaria rapidly.

This theory to explain the usual curve holds good for the unusual curve this year. While the rain is prevailing in October, November, and December there is but little chance for mosquitoes to travel and infect people; consequently the usual rise in December is not seen, and the increase, which is slight, is probably due to old cases. But owing to the wet there is more malaria than in previous years—*e.g.*, October, 1901, from 7,000 to 8,000 cases, in November 8,000 to 9,000, in December 12,000 to 13,000, while in 1902 the figures are 11,000 to 12,000, 11,000 to 12,000, 12,000 to 13,000, respectively—so that the amount in December of the two years is about the same, while that of October and November is much above the average; hence the rise is not observed, though the number of cases of malaria in December is as great.

The Malaria in the East.—Chart IV. shows the curve of total cases of disease, Chart V. the malaria, and Chart VI. the rainfall. If these are compared with previous years, it will at once be seen that they closely coincide. The rainfall curve does not show the rise in April which it did in 1901. The explanation given above explains these curves. There does not appear to have been heavy rain in October and December, as seen in the west.

General Remarks.—It will thus be seen that the rainfall, influencing the development of the mosquito, produces an enormous effect on the health of Ceylon. Further, that malaria is by far the most important disease of Ceylon, and that this is more so in the east than in the west. The similarity of the curves of the total disease and that of malaria is in general well marked; the other rises in the general curve being due most probably to dysentery and diarrhoea, though this requires further investigation. The most unhealthy month in Ceylon is January.

GENERAL SANITARY CONDITION OF THE COLONY AND OF THE CHIEF TOWNS.

The general sanitary condition of the Island remains in much the same condition as last year. The same methods of disposal of dust and faecal matter exist, and, though by no means satisfactory, are still far from bad when compared with other tropical countries. The water supply is often very good, and steps are being taken every year to remedy defects.

Colombo.—The town is growing rapidly, and urgent methods are needed and are being taken to keep it in as sanitary a condition as possible.

Port sanitation is the first consideration, as the number of ships entering the port from all parts of the world is rapidly increasing, and the first line of defence to the town against disease is the sanitation of the port. This has been carried out in a most efficient manner during the year. In the town itself the streets have been made wider, so that air space is abundant, but the dust is objectionable and detrimental to health. The streets should, if possible, be watered more frequently to allay this nuisance. The houses of the poor still need much improvement, and attempts to make these more healthy and sanitary are making their mark. The scavenging is fairly good.

The faecal matter is still removed at night and buried. It need hardly be said that this is objectionable, and that some other method is desirable. Much has been done, but much remains to be done, with regard to the drainage of Colombo. Everywhere collections of stagnant water are to be seen. The smaller system of drainage, as proposed by Mr. Mansergh, C.M.G., is on the point of being carried out.

The water supply from Labugama is deficient in quantity; this defect will be remedied when the new reservoir in the northern part of the town is completed and the main duplicated from Labugama to Colombo. The analysis of the water shows it to be always of very good quality.

Infectious cases, *viz.*, smallpox and enteric fever, have been common.

Kandy, the capital of the Central Province, possesses a Municipality, and employs a medical man as Sanitary Officer. The drainage of the town is defective, but measures are under consideration for an improved system. The water supply is of good quality, but during a long drought is a source of some anxiety. The town itself is well scavenged, and is lighted by electricity. The burial of night soil is the method adopted for the conservancy of the town.

Jaffna, the chief town of the Northern Province, possesses neither a Municipality nor a Local Board. Certain parts of the town are in a very crowded and an insanitary state. There are two public latrines, which are not resorted to. The cesspit system is in vogue. The water supply is from uncovered wells. A new scheme for the water supply of the town is under consideration. Sunlight and free circulation of air are interfered with by the houses being huddled together and by high cadjan fences. The foreshore and other places are fouled and polluted. Drainage requires attention.

Galle, the capital of the Southern Province, possesses a Municipality. Although a good many improvements have been effected as regards the drainage and conservancy, much yet remains to be done. The water supply is still derived from the Bikke reservoir; a system of filtration has not yet been arranged owing to the cost. The dry-earth system has been introduced in some parts of the town, and has been found to work satisfactorily. Although a good deal has been done as regards the drains in the Fort, they are still very defective in several localities.

Batticaloa, the chief town of the Eastern Province, possesses a Local Board, and the sanitary condition is said to be fairly satisfactory. The drainage is very bad, and the water supply equally

Chart I.
Total Diseases in the West
1902.

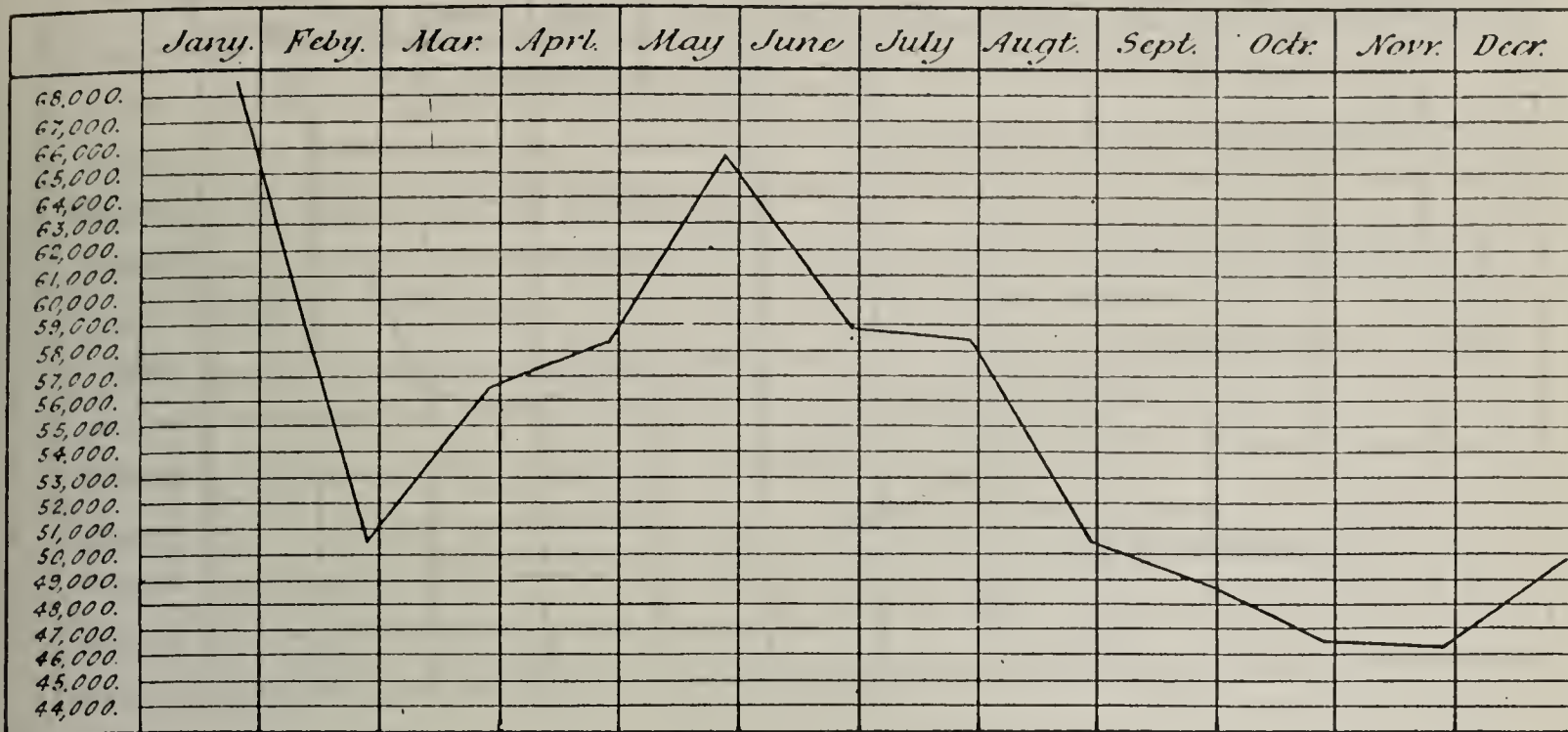


Chart II.
Malaria in the West
1902.

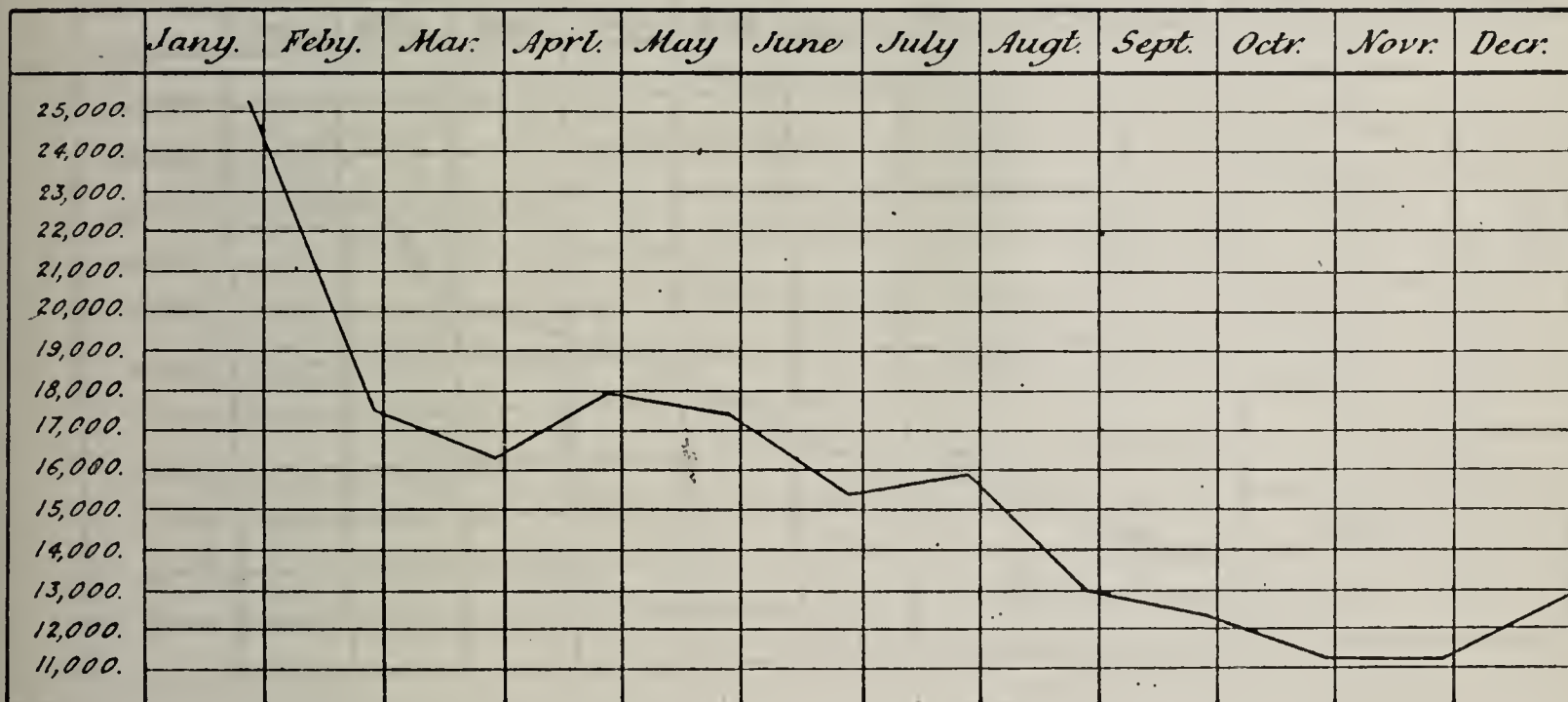


Chart III.
Rainfall in the West.
1902.

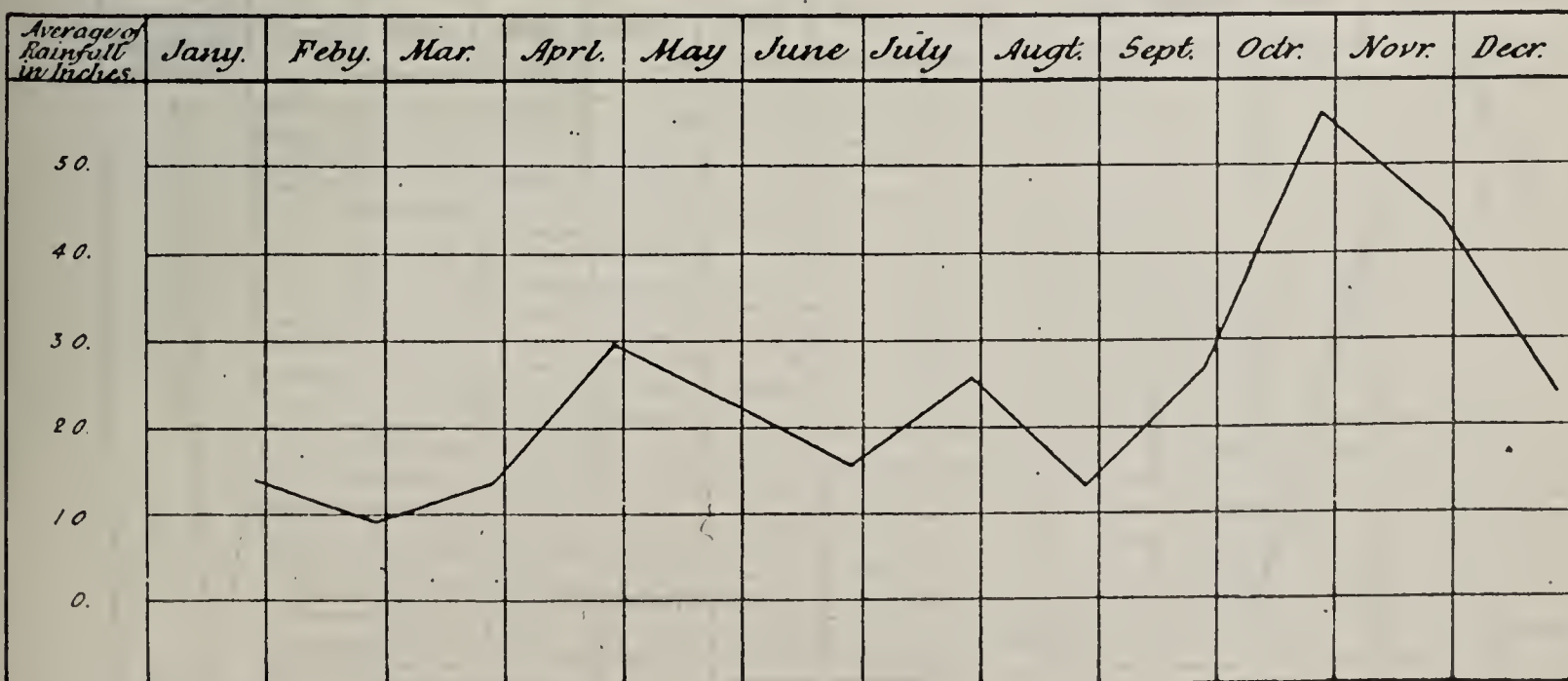


Chart IV.
Total Diseases in the East
1902.

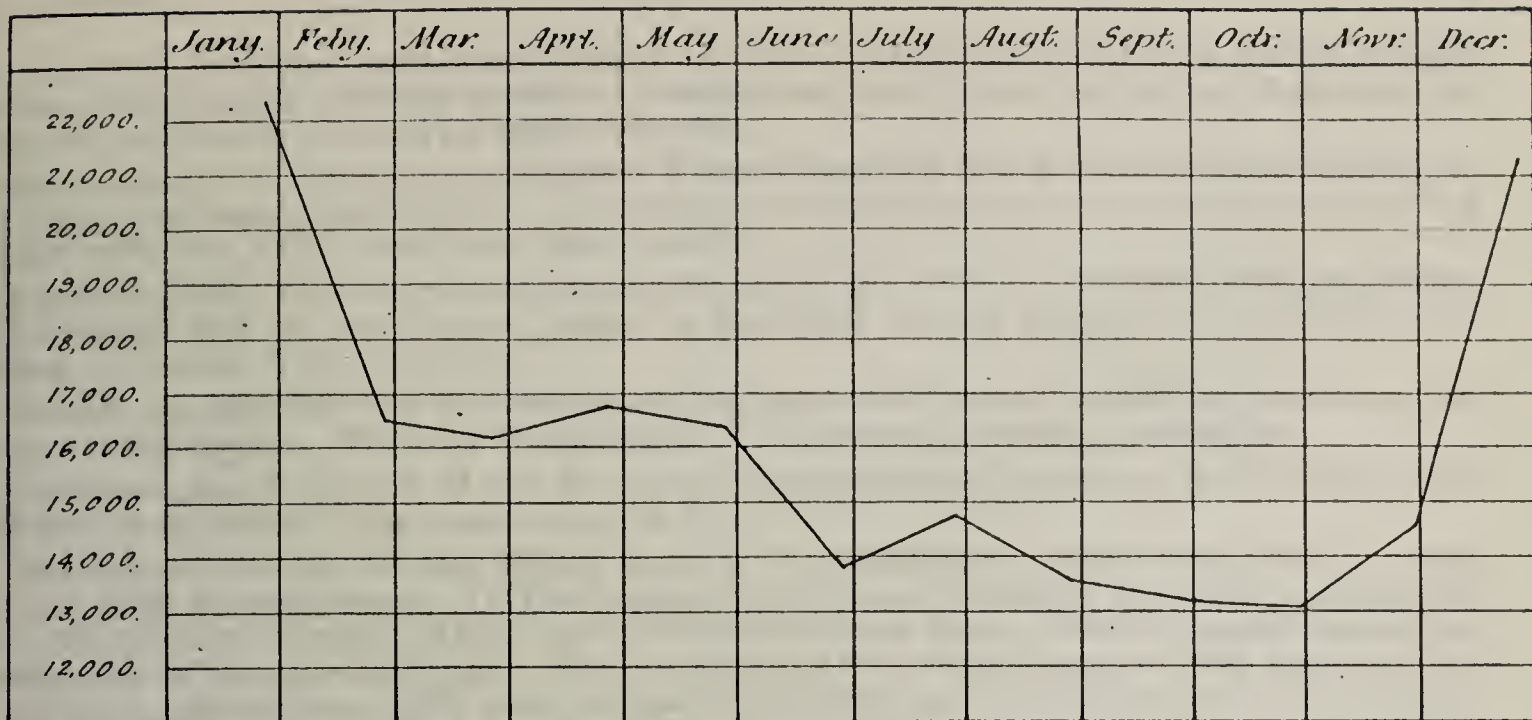


Chart V.
Malaria in the East.
1902.

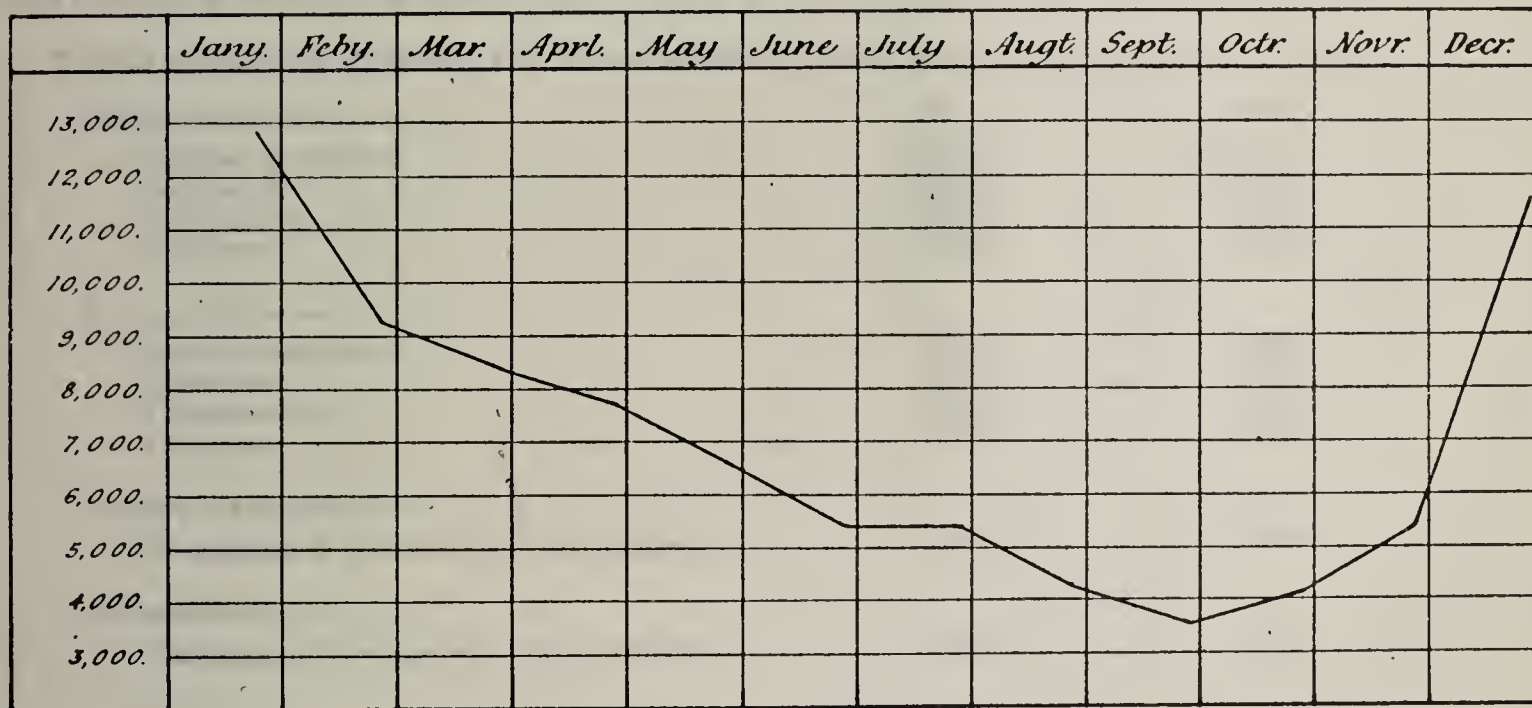
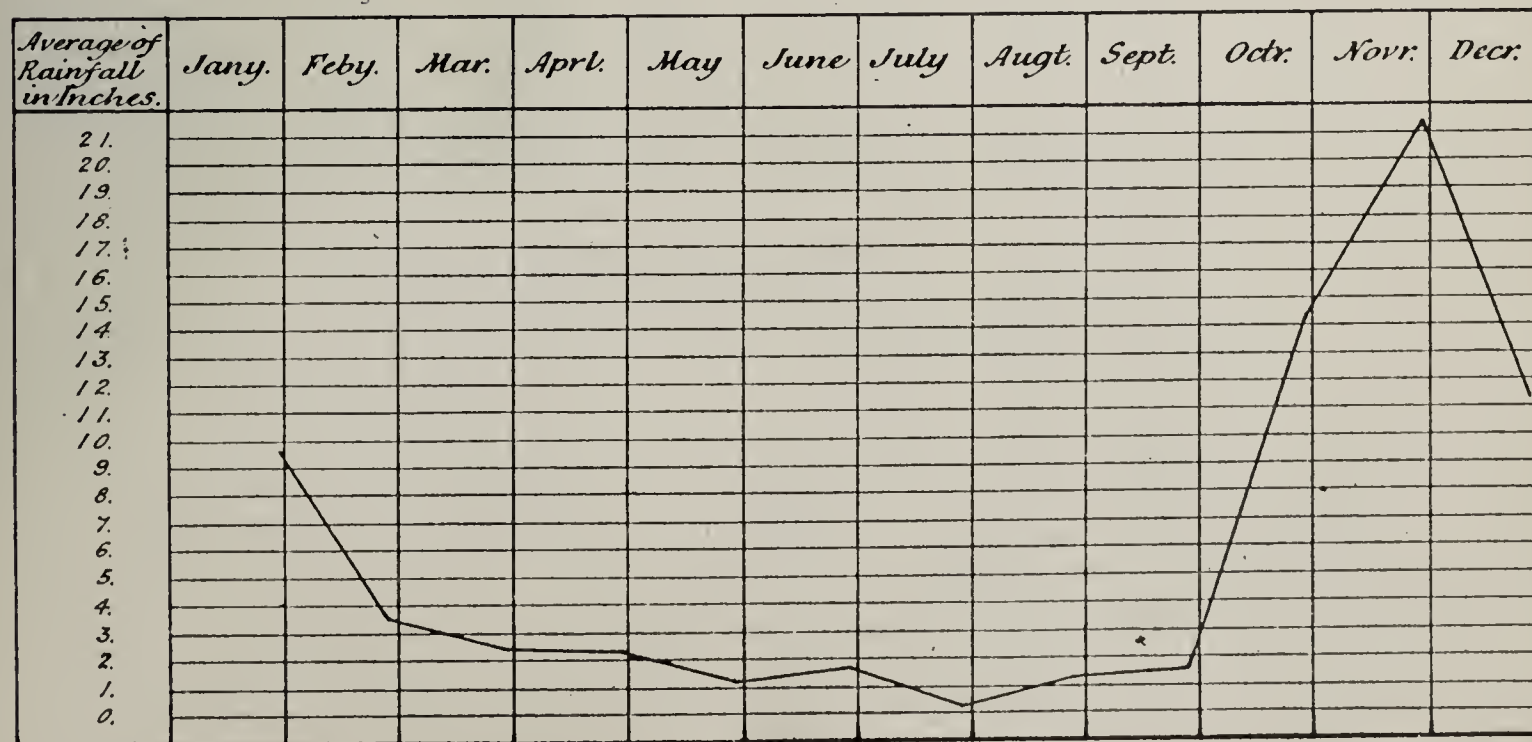


Chart VI.
Rainfall in the East
1902.



so ; the small supply of good water from wells is curtailed by the wells running dry during drought. The latrine arrangements are very defective ; cesspits are used. As in Jaffna, the foreshore and neighbouring jungles are polluted by human excreta.

Kurunegala, the chief town of the North-Western Province, is in a bad sanitary condition ; its drainage and water supply are defective. A new water supply scheme has been reported on, including designs and estimates, and is now under consideration.

Anuradhapura, the principal town of the North-Central Province, formerly had a reputation for unhealthiness, but of recent years, owing to improved sanitary measures, the health of the inhabitants has wonderfully improved.

Badulla, the chief town of the Province of Uva, is in a fairly sanitary condition, and is provided with a good water service. The town is well kept. The drainage, however, is defective.

Ratnapura, the chief town of the Province of Sabaragamuwa, possesses a Local Board, and is in a fair state of sanitation. The water supply is good.

Vaccination.—During the year 149,901 subjects were vaccinated ; 142,141 were primary vaccinations and 7,760 re-vaccinations. Of the former, 121,273 were successful and 9,382 unsuccessful, and in 11,486 subjects the result of the operation was not known, as they failed to present themselves for examination on the appointed days. The percentage of successful cases to total inspected was 92·81. Of the re-vaccinations, 4,652 were successful and 1,500 unsuccessful, and the result was not known in 1,608 cases, as the subjects failed to present themselves for inspection. The percentage of successful cases to total inspected was 75·61. Five calf institutions were in operation during the year at Colombo, Kandy, Galle, Jaffna, and Batticaloa for the preparation of glycerinated calf lymph, which was distributed in sufficient quantities to all parts of the Island. The inhabitants of the Island are well protected against smallpox, and to this cause is due the prevention of the spread of this disease from the various foci that existed during the year. A vote for a new central vaccine station in Colombo has been sanctioned, and it is hoped will be in working order by the middle of 1903.

The following tables give figures for 1901 and 1902 for comparison :—

Table showing the Primary and Re-vaccination in the Island during 1901 and 1902.

Primary Vaccination :—			1901.		1902.	
Number vaccinated	...	...	152,106	...	142,141	
Successful	...	...	126,500	...	121,273	
Unsuccessful	...	...	10,795	...	9,382	
Unknown	...	...	14,811	...	11,486	
Re-vaccination :—						
Number vaccinated	...	...	13,842	...	7,760	
Successful	...	...	7,744	...	4,652	
Unsuccessful	...	...	2,721	...	1,500	
Unknown	...	...	3,377	...	1,608	
Primary Vaccination :—						
Percentage of successful to total inspected	...	...	92·13	...	92·81	
Re-vaccination :—						
Percentage of successful to total inspected	...	...	73·99	...	75·61	

Table showing the Number of Persons vaccinated in the Island during 1901 and 1902.

	Primary Vaccination.						Re-vaccination.										
	Total Number of Cases vaccinated.	Number of Cases seen after Vaccination.			Percentage of Successful to Cases seen.	If in the Number of Cases absent and therefore unseen the Ratio be taken as in the Cases seen :			Total Number of Successful in Total of Cases vaccinated.	Number of Cases seen after Vaccination.			Percentage of Successful to Cases seen.	If in the Number of Cases absent and therefore unseen the Ratio be taken as in the Cases seen :			Total Number of Successful in Total of Cases vaccinated.
		Successful.	Unsuccessful.	Total.		Successful.	Unsuccessful.	Total.		Successful.	Unsuccessful.	Total.					
1901.																	
Government Vaccinators	116,319	96,091	7,341	103,405	92.92	11,992	108,083	6,935	2,143	9,078	76.39	2,289	709	2,998	9,224		
Medical Officers in Dispensaries	16,895	13,267	2,655	15,922	83.29	804	14,071	31	18	49	63.26	5	3	8	36		
On Estates	18,892	17,142	826	17,968	95.40	880	18,022	778	560	1,338	58.14	215	156	371	993		
Total	152,106	126,500	10,795	136,295	92.13	13,676	140,176	7,744	2,721	10,465	73.99	2,509	868	3,377	10,253		
1902.																	
Government Vaccinators	107,590	91,568	5,883	97,451	93.96	9,523	101,091	4,511	1,433	5,944	75.87	1,211	389	1,600	5,722		
Medical Officers in Dispensaries	15,824	12,212	2,867	15,079	80.98	602	12,814	30	35	65	46.15	1	2	3	31		
On Estates	18,727	17,493	632	18,125	96.51	580	18,073	111	32	143	77.62	3	2	5	114		
Total	142,141	121,273	9,382	130,655	92.81	10,705	131,978	4,652	1,500	6,152	75.61	1,215	393	1,608	5,867		

1901.

Government Vaccinators
Medical Officers in Dispensaries
On Estates

1902.

Government Vaccinators
Medical Officers in Dispensaries
On Estates

Plague.—The Plague Committee is a Standing Committee consisting of the following members:—The Hon. the Principal Collector of Customs (Chairman); K. W. B. Macleod, Esq. (Secretary); the Hon. Mr. F. R. Ellis, C.M.G.; the Hon. the Government Agent, Western Province; the Principal Civil Medical Officer; and the Mayor of Colombo. It has held regular meetings, and has revised from time to time the precautions instituted to combat an outbreak of this disease. This Committee is in reality a Port Sanitary Board, and any subject affecting quarantine and infectious disease arriving in Colombo is dealt with by it. All returns of plague from infected ports are received by the Committee, and telegraphic accounts of plague occurring in places adjacent to Ceylon are received regularly. The staff of Port Surgeons performed their duties with intelligence and promptitude, and were ever on the alert to discover disease among the arrivals at this port. Notwithstanding the strict supervision maintained, the travelling public from infected ports have not been inconvenienced, and no harsh or exasperating rules have been promulgated to interfere with their comfort or to prevent their landing. The disinfection of their baggage and of soiled linen has been well carried out by means of two Thresh's steam disinfectors. The shore disinfecting station has been most useful.

Galle continued to be the plague port; only one case of this disease was reported from the Harbour of Colombo during the year. The patient contracted the disease at Hongkong and was landed and isolated at Galle, and the contacts for this port were placed in quarantine. The patient recovered.

Rat destruction was carried out at the Customs premises and by the Municipality of Colombo and at Galle. A Clayton fire extinguisher for the disinfection of ships' holds by means of sulphurous acid gas arrived, but was not in working order.

All minor ports, with the exception of Kayts in the North, likely to be visited by native trading vessels from India, have been closed, and this arrangement has worked most satisfactorily. As a precautionary measure steam patrol boats have been employed round the coast.

The immigrant cooly traffic has not been interfered with, and several batches arriving from plague-infected parts of India have undergone the necessary period of quarantine at Ragama Camp, when, after proper disinfection of themselves and belongings, they have been drafted to their several estates.

III.—GENERAL.
MEDICO-LEGAL DUTIES.

During the year 1902, 230 analyses were conducted, of which 106 were judicial analyses, 33 were samples of kerosine oil, 8 were samples of fuel oil, 4 were samples of beer, and 26 were samples of water, spirits, &c., from His Majesty's Customs, Local Boards, and the Railway Department, and 53 were samples of water conducted at the request of the Government.

Of the 106 judicial analyses, 64 were undertaken for the detection of poisons and 42 for examination of stains. In the poisoning cases arsenic was detected in 8 analyses, mercury in 2, canabis indica in 10, morphia in 2, strychnine in 2, silver nitrate in 1, lead in 1, zinc sulphate in 2, acid sulphuric in 1, soda sulphate in 2, croton oil in 1, turpentine in 1, sandalwood oil in 2, and in the rest of the analyses no poison was detected.

A synopsis of the analyses for the year in a tabular form is herewith annexed:—

Synopsis of the Analyses for 1902.									
Judicial				42	{ Mammal blood detected in				
					{ No blood				
					{ Arsenic				
					{ Mercury				
					{ Canabis indica				
					{ Morphia				
					{ Zinc sulphate				
					{ Soda sulphate				
					{ Silver nitrate				
					{ Acid sulphuric				
					{ Strychnine				
					{ Lead				
					{ Croton oil				
					{ Turpentine				
					{ Sandalwood oil				
					{ No poison				
					{ Total				
					{ Kerosine oil ..				
					{ Fuel oil ...				
					{ Beer ...				
					{ Water, spirits, &c., from His Majesty's Customs, Local Boards, and Railway Department				
					{ Analyses for Government purposes				
					{ Total				

ADMINISTRATIVE : HOSPITALS AND ASYLUMS.

During the year 1902, 67 hospitals and asylums were in operation, against 66 the previous year. A district hospital at Maturata was opened during the year.

Numbers treated.—In the Civil and Lying-in Home Hospitals there were 43,973 cases treated, with 3,698 deaths, being 24 cases more and 521 deaths less than in the preceding year. The daily average sick was 1,652.51, as against 1,647.40 the previous year.

In the Field Hospitals there were 4,426 cases treated, with 171 deaths, against 4,680 treated and 156 deaths during the preceding year. The daily average sick was 179.46, as against 184.29 during the previous year.

The number treated in the five Immigrant Hospitals was 1,855, against 2,047 in the previous year. Of the total treated, the deaths numbered 84, or 6 less than the preceding year. The daily average sick was 73.49, as against 84.45 the previous year.

In the District Hospitals 14,928 cases were treated, against 14,816 during the preceding year. There were 2,510 deaths, as against 3,511 in the previous year. The daily average was 792.41, against 844.27 the previous year.

General Hospital, Colombo.—The total number of patients treated at this institution during the year was 16,035 with 1,101 deaths, against 15,614 cases and 1,219 deaths in the previous year. Of the total treated, 412 remained from the previous year and 15,623 were new admissions, 14,479 were discharged, and there remained 455 under treatment at the end of the year. The daily average sick was 515.09, and the percentage of deaths to total treated was 6.86. The institution consists of twenty-four wards and eight solitary rooms, and the number of beds assigned is 425. Two new temporary wards containing room for 84 beds were opened during the year. The water supply is drawn from the Labugama reservoir, which supplies the town. The supply is sufficient, and the quality good. The latrines are on the dry-earth system.

Paying Wards, General Hospital, Colombo.—These wards consist of Planters' (4 wards with 4 beds), Anthonisz' (2 wards with 2 beds), Passengers' (8 wards with 8 beds), Seamen's (3 wards with 26 beds), Clerical (1 ward with 2 beds), and Cargills' (2 wards with 2 beds). The total number of patients treated in these wards during the year 1902 was 577 with 41 deaths, against 639 cases and 48 deaths in 1901. Of the total treated, 24 remained from the previous year and 553 were new admissions, 520 were discharged, and there remained 16 under treatment at the end of the year. The daily average sick was 27.61, and the percentage of deaths to total treated was 7.11.

Lunatic Asylum, Colombo.—During 1902, 165 patients were admitted into the Asylum, which, with 463 remaining from the previous year, made the total insane population 628, of whom 410 were males and 218 females. The daily average number of inmates was 479.28. Of the total treated, 93 were discharged recovered (62 males and 31 females). There were 52 deaths, and 483 remained under treatment at the end of the year.

The institution consists of 18 dormitories, 20 day-rooms and corridors used as day-rooms, and 134 single rooms. The new block of cells on the female side which was completed last year was occupied throughout the year. The water supply is drawn from the Labugama reservoir, which supplies the town. The quality is good. The Superintendent complains the water supply is not sufficient; this is due to the want of pressure in the mains, and has been reported. There are 19 lavatories, 17 baths, and 19 latrines. The dry-earth system is carefully carried out. The number of patients secluded under lock and key was 14, and the number of times seclusion was resorted to was 104, and the longest duration in any single instance was six hours. There were three cases of accidental injury to the patients by themselves, four of injury to patients by other patients, and none by attendants. One case of suicide occurred during the year. Such patients as are well enough are given daily exercise, while others are confined to the airing courts. Outdoor sports (cricket and tennis) as well as indoor games (cards, bagatelle, musical instruments, &c.) are provided. A gramophone was purchased from industrial funds, and it continues to be a source of amusement and wonder to the patients. A library is in existence, and those who can read are regularly supplied with books and papers, but it has not been availed of to any large extent. The inmates of the Asylum are employed in gardening, trade, house work, &c., and the proceeds of their industry is formed into a fund, which at the end of the year amounted to Rs. 18,080.03 :—

Industrial Fund Account, 1902.

		Rs.	c.	Rs.	c.	Rs.	c.
Balance on 31st December, 1901 :—							
Cost of 4 per cent. Inscribed Stock	...	8,480	0	8,629	85		
Do. do.	...	4,000	0	4,400	0		
						13,029	85
Fixed deposit, Hongkong and Shanghai Bank	...			...		1,881	0
Current account do.	...			...		2,332	85
Cash in hand	...			...		20	61
Receipts in 1902 :—						17,264	31
Interest on current account	...	51	20				
Interest on fixed deposit	...	119	4				
Dividends on Government Stock	...	499	20				
Sale of produce, &c.	...	1,448	50				
				2,117	94		
Expenditure in 1902 :—							
General current expenditure	...	1,302	22				
				1,302	22		
Balance Profit	...					815	72
				Total Funds	...	18,080	3
Invested, &c., as follows :—							
In 4 per cent. Ceylon Government Stock	...			8,629	85		
Do. do.	...			4,400	0		
						13,029	85
Fixed deposit, Hongkong and Shanghai Bank	...			...		2,000	4
Current account do.	...			...		3,039	36
Cash in hand	...			...		10	78
				Total	...	18,080	3

Houses of Observation for Suspected Lunatics.—There were four institutions of this nature at Colombo, Kandy, Galle, and Jaffna, into which were admitted for observation 315 patients, which, with 10 remaining from the previous year, made a total of 325, of whom 103 were transferred to the Asylum at Colombo, 198 were discharged, 4 died, and 20 remained under observation at the end of the year.

Leper Asylum, Hendala.—The Leper Asylum received 106 patients for treatment during the year, which, with 276 remaining from the previous year, made the total leper population 382. The daily average in the Asylum was 225.25. Of the total treated, 30 were discharged improved, 41 died. Of those returned as discharged, 22 absconded, 2 were on leave and subsequently re-admitted, 4 were

sent back to their homes in India at their own request, 1 non-leprous patient was discharged by authority, and 1 was removed with the consent of Government for segregation in his own house, and there remained at the end of the year 311 patients under treatment. The Asylum has 332 beds. The water supply is ample, and the quality pure. There are bathrooms in connection with the Asylum supplied with hot and cold water according to the requirements of patients. The dry-earth system is in use, the excreta being disposed of by incineration.

De Soysa Lying-in Home.—The total number of patients treated at this institution during the year was 737, against 499 in 1901 and 163 in 1890. Of these, 695 were discharged cured, 2 removed cured, 4 removed to the General Hospital, 9 died, and 16 were remaining under treatment at the end of the year. The daily average sick was 15·52. The percentage of deaths to total treated was 1·25, against ·80 in 1901 and 3·08 in 1890.

This institution is becoming most popular, and its usefulness is much appreciated by the poorer residents in Colombo and its neighbourhood. The number of Moorish women seeking admission increases every year. A new small ward and operating room were opened during the year.

In the Lying-in Home 14 pupil midwives received training in 1902, of whom 13 obtained certificates after passing a satisfactory examination.

The following operations were performed during the year :—

Forceps extractions	...	...	...	...	124
Version	...	...	...	...	19
Craniotomy	...	...	...	...	3
Evacuation	...	...	...	...	14
Removal of placenta	...	...	...	...	10
Acceleration of labour by water bags	...	...	...	...	8
Total					178

Lady Havelock Hospital.—In this institution 1,072 patients were treated, against 1,030 in the previous year. Twenty-seven remained from the previous year, and 1,045 were new admissions. The daily average sick was 31·26. Of the total treated, 958 patients were discharged. There were 83 deaths, and 31 remained under treatment at the end of the year. Of the 1,072 patients, 320 were children (129 boys and 191 girls). There were 40 operations performed, with 1 death.

Police Hospital, Colombo.—740 patients were treated in the Police Hospital, of whom 728 were discharged after treatment, 1 died, and 11 remained at the end of the year. The daily average sick was 16·23. At the outdoor dispensary of this hospital 2,095 persons were treated during the year, who paid 2,478 visits.

Grenier Eye, Ear, and Throat Infirmary.—At this institution 4,927 cases were treated during the year, as against 4,336 in the previous year. The contributions during the year amounted to Rs. 124·72, and were of a purely voluntary nature.

Branch Hospitals.—Colombo, Kandy, and Galle are provided with a special hospital for the treatment of women suffering from venereal diseases. The total number of new cases admitted was 351, which, with 20 remaining from the previous year, makes a total of 371. Of these, 351 were discharged, and 18 remained under treatment at the end of the year. Of the 371 females treated in the three Branch Hospitals, 27 were treated for primary syphilis, 68 for secondary syphilis, 62 for tertiary syphilis, 4 for inherited syphilis, 156 for gonorrhœa, and 54 for other diseases the result of venereal poison.

Jail Hospitals and Sick Prisoners.—The number of prisoners admitted during the year into the different jails in the Island was 12,766. The average daily strength of prisoners was 2,656·40. There were treated during the year in the several Jail Hospitals 5,363 prisoners, against 4,638 in the previous year. The deaths numbered 117, against 112 in 1901.

The following table gives the number of admissions, number of deaths, average strength, death-rate to admissions to hospitals, and to average strength for the past four years :—

Year.	Admissions to Hospitals.		Number of Deaths.		Average Strength of Prisoners.		Death-rate to Admissions.		Death-rate per 1,000 of Average Strength.	
1899	...	4,362	...	95	...	2,591·53	...	2·17	...	36·65
1900	...	4,465	...	102	...	2,515·14	...	2·28	...	40·55
1901	...	4,638	...	112	...	2,752·71	...	2·41	...	40·69
1902	...	5,363	...	117	...	2,656·40	...	2·18	...	44·05

Kalmunai Leper Ward.—At this institution 30 lepers were treated during the year, of whom 19 were discharged relieved, 2 died, and 9 remained under treatment at the end of the year.

Friend-in-Need Society's Hospital at Jaffna.—The Friend-in-Need Society's Hospital at Jaffna received 1,567 patients, which, with 64 remaining from the previous year, made a total of 1,631. Of these, 1,509 were discharged, 49 died, and there remained under treatment at the end of the year 73 patients. At the outdoor dispensary of this institution 8,056 persons were treated during the year, who paid 15,067 visits, and contributed voluntarily Rs. 1,474·83.

Kanatta Infectious Diseases Hospital.—At this institution 16 cases of infectious diseases remained from the previous year, and 837 were admissions, making a total of 853. Of these, 802 were discharged cured, 40 died, and 11 remained in the hospital at the end of the year. The death-rate was 8·77 per cent. Of the 853 patients, 120 were treated for smallpox, 560 for chickenpox, 118 for measles, 3 for whooping cough, 12 for mumps, 6 for acute diarrhœa, 27 for observation for smallpox, and 7 for observation for cholera. Of the 120 cases of smallpox, 32 died. Two cases of smallpox were remaining in hospital from the previous year.

Total Deaths.—The total deaths numbered 6,560, against 8,092 in the previous year, showing a decrease of 1,532. I subjoin a table showing the death-rate in the various hospitals and asylums in

the Island for the year, as compared with the previous year. I have separated the death-rates among the mixed races and Malabars for purposes of comparison:—

Hospitals.	Mixed Races.		Malabars.		Total.	
	1901.	1902.	1901.	1902.	1901.	1902.
Civil	5.92	5.59	18.60	16.01	9.06	8.18
Field	3.08	3.22	7.40	9.97	3.23	3.86
Immigrant	1.86	3.71	10.48	6.37	4.39	4.52
District	6.28	4.60	28.98	21.97	23.69	16.88
Asylums	12.57	7.49	14.28	8.37	11.54	7.61
Total	5.62	5.26	22.94	18.25	12.18	9.87

The percentage of deaths to cases treated in the Civil Hospitals showed a slight decrease among the mixed races and a decrease of 2.59 among the Malabars. In the Field Hospitals the increase among the mixed races was slight, and that among the Malabars was 2.57. In the Immigrant Hospitals the increase among the mixed races was 1.85, but among the Malabars there was a decrease of 4.11. In the District Hospitals there has been a decrease of 1.68 among the mixed races and 7.01 among the Malabars. Taking all the hospitals and asylums together, there was a slight decrease among the mixed races and 4.69 among the Malabars. The percentage of deaths to total treated was 9.87, against 12.18 during the previous year.

Hospital Accommodation.—This was generally sufficient; occasionally some overcrowding took place. This especially applies to the General Hospital, Colombo. Although two new temporary wards have been opened during the year, containing room for 84 beds, overcrowding still continues.

Water Supply.—With the exception of the following institutions, Matale, Mannar, Galle, Chilaw, Nikaweratiya, Trincomalee, the water supply in all the hospitals was reported to be good, pure, wholesome, and abundant. Water for drinking purposes is, as a rule, boiled and filtered before use.

Bathrooms.—All hospitals are provided with separate bathrooms for males and females and furnished with tubs, which are filled with hot or cold water according to the requirements of the patients. Patients who can help themselves, however, prefer to bathe in streams where there are such adjoining a hospital.

Drains.—There are no covered drains. The drains are all surface ones for carrying away the ward washings, rain, and storm water.

Sewage.—The conservancy of the latrines is entirely on the dry-earth system, the excreta being removed daily and buried or incinerated at some distance from the hospitals.

Inspection.—The hospitals were all inspected either by me, the Acting Principal Civil Medical Officer, or the Colonial Surgeons of the respective Provinces. The number of these visits of inspection and the official designation of the visitors will be found given in the return of each institution. The books were produced when called for, and were generally found complete and made up to the date of examination. The reports of inspection by the Colonial Surgeons as well as those by me were forwarded to Government when necessary.

Food Supply.—The provisions for the various hospitals were supplied by purveyors on contracts approved by Government. The system works satisfactorily. The medical officers in charge of the respective hospitals examine the food before it is served out to the patients, and reject such articles as do not come up to contract sample.

Dispensaries.—376 dispensaries were in operation. Of these, 215 were Civil, 44 District, and 117 Estate. They are distributed as follows:—In the Western Province 31, Central 52, Northern 38, Southern 35, Eastern 18, North-Western 25, North-Central 19, Province of Uva 21, and Province of Sabaragamuwa 20. In the Civil and District Dispensaries there were treated 975,160 persons, against 1,073,993 in the previous year, who paid 1,499,227 visits and contributed voluntarily Rs. 22,373.79. Estate Dispensaries were kept up on the estates by the planters, medicine being supplied free by Government, and the resident dispenser, who is paid by the estate, being appointed on the recommendation of the Principal Civil Medical Officer.

Port Duties and Immigration.—The number of vessels which arrived at the port of Colombo was 2,802, against 3,039 in the previous year, 2,375 being steamers and 427 native craft. The number of native traders was 60,672 and coolies 33,760. Included as traders were 52,140 men, 4,293 women, 3,194 children, and 1,045 infants. Of the coolies, 21,440 were men, 7,182 were women, 3,271 were children, and 1,867 were infants.

Ragama Camp.—The total number of coolies who passed through the camp during 1902 was 34,280, against 45,823 during the previous year. There were five distinct outbreaks of cholera during the year. Nineteen persons were attacked, of whom 13 died. These outbreaks occurred during the months of July and August. Of the other diseases admitted into the hospital, there were 4 cases of diarrhoea, 1 of fracture, 2 of fever, and 1 of pneumonia. Of the total number of coolies who passed through the camp, 1,411 persons were vaccinated, and the rest either had marks of successful vaccination or of smallpox. The drainage system of the camp is efficient. The conservancy is carried out on the dry-earth principle, the excreta being disposed of by incineration. There is a good and ample water supply. A new camp for coolies was completed during the latter part of the year.

De Soysa Bacteriological Institute.—Since its opening it has undertaken work of diverse character, and is now supplying a long-felt want in the Colony by its researches in Bacteriological analyses of tissues, secretions, blood, &c., so indispensable to scientific diagnosis of diseases; and the Acting Director, Dr. S. C. Paul, F.R.C.S., is consulted by Government medical officers and private medical practitioners for reports on specimens submitted by them on bacteriological and allied subjects.

Medical College.—Great improvements have been effected in this institution; new laboratories have been made out of the old lecture rooms, new apparatus has been obtained, and the number of lecturers has been increased. The teaching has been brought up to date. During the year 20 new medical students and 4 apothecary students entered the College. There were 87 medical and 37 apothecary students at the end of the year. The total fees amounted to about Rs. 16,000.

Civil Medical Stores.—Dr. H. M. Fernando was in charge of this institution as Medical Superintendent. Mr. A. D. Cotton is the Chief Storekeeper. The drugs, chemicals, and instruments received from England amounted to Rs. 149,463.05, from India Rs. 378.62. The cost of articles purchased from the Government Stores and the local market for the preparation of drugs in the Medical Stores came to Rs. 8,202.80, while the cost of repairing surgical instruments amounted to Rs. 40.25, and that of transport and postage to Rs. 3,611.04, contingencies and petty expenses to Rs. 539.96, the sale of medicine to Government Departments and others Rs. 473.09, and sale of medicine to planters Rs. 1,817.76. The sale of unserviceable articles realized Rs. 443.74, and the value of the surgical instruments lost and paid for by the officers of the Department amounted to Rs. 142.50.

Nursing.—Votes were asked for an increase of trained European nurses for the paying wards, General Hospital, and an increase in the number of the Religious Sisters, which have been approved.

Nursing Staff.

Anglican Sisters ...	...	...	...	3
Roman Catholic Sisters ...	...	...	...	17
Superintendent of Nurses ...	...	...	...	Vacant
Matrons ...	...	...	...	27
Nurses ...	...	...	...	27
Pupil Nurses, Lady Hayelock and Kandy Civil Hospitals ...	...	...	...	15
Total ...				89

Strength of the Medical Department.—The strength of the Medical Department was as follows:—1 Principal Civil Medical Officer and Inspector-General of Hospitals, 1 Assistant Principal Civil Medical Officer, 1 Registrar of the Medical College, 7 Colonial Surgeons, 1 Superintendent of the Lunatic Asylum, 1 Surgeon in charge of the General Hospital at Colombo, 2 Medical Women, 22 Assistant Colonial Surgeons, 28 Deputy Assistant Colonial Surgeons, 46 Sub-Assistant Colonial Surgeons, 24 Probationer Sub-Assistant Colonial Surgeons, 4 Health Officers, 248 Apothecaries, 1 Chief Medical Storekeeper, 1 Chief Inspector of Vaccination, 6 Inspectors of Vaccination, and 108 Vaccinators.

Changes in the Department.—The changes were the retirement of Dr. W. G. Keith, Colonial Surgeon, Southern Province, on 1st August, 1902, after thirty-two years' service, and the deaths of Sub-Assistant Colonial Surgeons J. S. Johnpulle and D. P. Nicholas in September and October respectively. Deputy Assistant Colonial Surgeon V. Saravanamuttu, M.D., retired owing to ill-health on 16th August, 1902. Dr. S. C. Paul, F.R.C.S., was appointed Professor of Anatomy of the Medical College.

The expenditure of the Department, exclusive of working hospitals under the Medical Aid Ordinance, amounted to Rs. 1,278,874.28, including exchange compensation, against Rs. 1,339,923.80 in the previous year. Under Personal Emoluments and Allowances the expenditure was Rs. 311,211.15, including exchange compensation, against Rs. 313,442.35 in 1901. The expenditure under Other Charges was Rs. 955,651.89, against Rs. 1,011,842.41 last year; under Harbour Service Rs. 800. against Rs. 1,803.22 in 1901; and under the vote for Plague Precautions Rs. 11,211.24, against Rs. 12,835.82 in the previous year.

The receipts on account of paying patients in hospitals amounted to Rs. 46,196.48, against Rs. 45,225.15 in 1901. The collections at the Civil Outdoor Dispensaries was Rs. 20,195.34, against Rs. 18,367.36 last year. The cost of medicines issued to the Estates Branch of the Department amounted to Rs. 111,585.27, against Rs. 110,605.77 in 1901, while the sale of medicines and superfluous articles, Medical College fees, &c., amounted to Rs. 49,443.30, against Rs. 41,682.62 last year. Deducting the receipts under the heads above specified from the expenditure, the nett expenditure was Rs. 1,051,453.89, against Rs. 1,124,042.90 in 1901.

The following statement shows the expenditure and receipts as compared with 1901:—

EXPENDITURE.	1901.		1902.		Increase.		Decrease.	
	Rs.	c.	Rs.	c.	Rs.	c.	Rs.	c.
Personal emoluments ...	290,055	6	287,337	96	—	...	2,717	10
Personal allowances ...	23,387	29	23,873	19	485	90	—	...
Total ...	313,442	35	311,211	15	485	90	2,717	10
Other charges ...	76,106	73	79,216	61	3,109	88	—	...
Hospitals and dispensaries ...	723,315	89	722,027	53	—	...	1,288	36
General ...	212,419	79	154,407	75	—	...	58,012	4
Total ...	1,011,842	41	955,651	89	3,109	88	59,300	40
Harbour service ...	1,803	22	800	0	—	...	1,003	22
Plague precautions ...	12,835	82	11,211	24	—	...	1,624	58
	14,639	4	12,011	24	—	...	2,627	80
Grand Total ...	1,339,923	80	1,278,874	28	3,595	78	64,645	30

RECEIPTS.	1901.	1902.	Increase.	Decrease,
	Rs. c.	Rs. c.	Rs. c.	
Amount received from } paying patients in hos- pitals	45,225 15 ...	46,196 48 ...	971 33 ...	—
Collections at dispensaries	18,367 36 ...	20,195 34 ...	1,827 98 ...	—
Cost of medicines issued } to Estates Branch } institutions	110,605 77 ...	111,585 27 ...	979 50 ...	—
Sales of medicines and } superfluous articles, } and College fees	41,682 62 ...	49,443 30 ...	7,760 68 ...	—
Total ...	215,880 90	227,420 39	11,539 49	—
Nett Expenditure ...	1,124,024 90	1,051,453 89		

Prisoners of War.—Camps for prisoners of war existed at the following stations during the year :—Diyatalawa, Urugasmanhandiya, Mount Lavinia, Ragama, and Hambantota. The camp at Urugasmanhandiya was closed on the 5th November, that at Ragama on the 20th November, that at Hambantota on the 27th July.

The number of prisoners rapidly decreased towards the end of the year, and the average of all sick at the largest camp (Diyatalawa) was 196 per 1,000 for the whole year. At this camp the mortality from all causes, taking 3,423 as the daily average strength, was 7·59 per 1,000.

The general health of the camps was satisfactory. Enteric fever was absent at Diyatalawa until April, when there was a re-appearance. The cause was traced to infection outside the camp. There were 46 cases, with 6 deaths.

Dysentery was prevalent, and towards the end of the year assumed a bad type and contributed largely to the death-rate.

The total number of cases treated in hospital (Diyatalawa) was 718, and at the outdoor dispensary 994. Five cases of mania and melancholia occurred. One death was due to tumour of the brain. One death was due to intestinal obstruction, for which an abdominal section was performed. The admissions at the other hospitals were very small. The sanitation of the camps was satisfactory. The water supply and food were of good quality.

ESTATES BRANCH.

During the year 1902 there were 1,763 estates scheduled to 33 districts and 31 sub-districts, with 20 District Hospitals and 29 District Dispensaries and 13 Civil Hospitals and Dispensaries.

The following are the districts and sub-districts, with the number of estates scheduled to each :—Avisawella District 47, sub-district Hanwella 10, sub-district Bandaragama 11, sub-district Horana 6; Kalutara District 40, sub-district Horawella 4; Kandy District 72, sub-district Galagedara 15, sub-district Kadugannawa 20, sub-district Hanguranketa 3; Elkaduwa District 21, sub-district Wategama 29; Kelebokke District 44; Dikoya District 62, sub-district Bogawantalawa 31, sub-district Watawala 39; Maskeliya District 73; Gampola District 56, sub-district Pussellawa 34; Lindula District 56, sub-district Agrapatana 43; Dimbula District 54; Matale District 81, sub-district Rattota 32, sub-district Gammadnwa 18; Teldeniya District 28, sub-district Rangalla 26; Deltota District 42; Nuwara Eliya District 37, sub-district Nanu-oya 18; Maturata District 30; Ramboda District 35; Uda Pussellawa District 32, sub-district Mulhalkele 3, sub-district Maspana 1; Nawalapitiya District 49, sub-district Dolosbage 36; Kotmale District 18; Morawak Korale District 16, sub-district Deniyaya 2; Balapitiya District 16; Elpitiya District 1; Udugama District 13; Badulla District 59, sub-district Pingarawa 24, sub-district Passara 10; Lunugala District 13, sub-district Madulsima 29; Monaragala District 10; Hapntale District 17, sub-district Bandarawela 8, sub-district Haldummulla 23, sub-district Koslanda 27; Kurunegala District 41, sub-district Rambukkana 2; Ratnapurra District 22; Balangoda District 33; Rakwana District 25; Kegalla District 22; Karawanella District 63, sub-district Kitulgala 17, sub-district Aranayaka 18.

To attend to the medical wants of the above the following officers were employed :—Deputy Assistant Colonial Surgeons 15, Sub-Assistant Colonial Surgeons 10, and Apothecaries 28.

During 1902 there were 10,995 estate labourers treated in the District Hospitals and Civil constituted District Hospitals, against 12,017 in 1901. Of these, 2,375 died, a death-rate of 21·60 per cent. Of the mixed races, 14,656 were treated, of whom 824 died, a death-rate of 5·62 per cent.

In the Civil Hospitals worked partly as District Hospitals the death-rate of estate labourers was 21·71 per cent., whilst in the District Hospitals it was 21·55 per cent. The highest death-rate (30·34 per cent.) among the estate labourers occurred in the District Hospital at Nawalapitiya, and the lowest (1·38 per cent.) in the Civil Hospital at Galle. The admissions into the former were 468, into the latter 72. In the Civil Hospital, Kalutara, and the District Hospital, Dimbula, there were no deaths among estate labourers. The admissions into the former were 7 and into the latter 302.

The total number of days the estate labourers stayed in hospital was 266,920, an average of twenty-four days. Of these, 185,286 persons were paid for by the estates, the rest being charged to the fund. The total number of days mixed races stayed in District Hospitals was 184,051, an average of twelve days.

The total number of estate labourers treated at the outdoor dispensaries was 44,726. The total number of estate labourers treated on estates was 17,344.

The total number of births reported from estates was 6,691, of which 3,418 were males, 3,176 were females, and 97 were still-births.

The number of deaths reported from estates was 9,428, of whom 4,599 were males, 4,828 were females, and in 1 case the sex was not stated.

The expenditure under the Medical Aid Ordinance amounted to Rs. 518,614·99, including exchange compensation, and receipts to Rs. 339,645·22, derived from the following sources :—Export duty Rs. 142,013·59, hospital charges for treatment of coolies Rs. 59,674·50, recovered for visits paid to estates Rs. 21,748, sale of unserviceable and superfluous articles Rs. 154·92, medicines sold to

superintendents of estates Rs. 1,809·89, medicines sold in bulk to superintendents of estates Rs. 8,548·93, and prescriptions compounded Rs. 2,741·37, dispensary collections Rs. 2,178·45, cost of maintenance, medicine, and funeral expenses of other than estate labourers Rs. 96,719·14, recoveries for maintenance of others Rs. 4,056·43. The nett expenditure was Rs. 178,969·77. 117 dispensaries are now established in the planting districts.

Appended are Tables I. and II. showing the receipts and expenditure of the Estates Branch of the Department.

Colombo, April 30, 1903.

ALLAN PERRY, M.D., D.P.H.,
Principal Civil Medical Officer and
Inspector-General of Hospitals.

APPENDIX.

PROVINCIAL REPORTS.

(1) WESTERN PROVINCE.

This Province is under the supervision of Colonial Surgeon G. P. Schokman, M.B., C.M., whose report is subjoined :—

Population.—The estimated population of the Western Province for the year was 940,045. The number of births and deaths registered during 1902 was 33,216 and 21,274 respectively, and the birth- and death-rates per mille 35·6 and 22·8.

Prevalence of Sickness.—In my report for last year I had the pleasure of reporting that the general health of the Province was excellent. This condition continued throughout the year in all stations and parts of this Province. There was an entire absence of outbreaks of malarial fever, and even the unhealthy and low-lying district of Negombo was free from it. The rainfall was abnormally abundant, and no ill-effects appear to have resulted therefrom.

Dysentery.—In the months of January, February, November, and December dysentery prevailed in the villages of Attygala, Jaltara, Henpita, and Hanwella of the Hewagamu korale, due to drinking contaminated water from surface wells which were covered by the heavy floods. The outbreak was not severe, and there were no deaths. Two rather extensive outbreaks of dysentery occurred in the Moratuwa district, viz., one in the early part of the year in the villages Jambureliya and Mampe, the other at Siddamulla. In the latter place there were five deaths, and the poor received assistance from Government, while they were treated by their own native doctors. Dysentery also prevailed in the villages of Wadduwa, Mahabellana, Waskaduwa, and Ponwatta of the Panadure district, and to some extent in the town of Panadure.

Enteric Fever.—This disease prevailed throughout the town of Colombo to a greater extent than usual. In Horatuduwa, a village close to Moratuwa, there was an epidemic traced to drinking water from polluted wells. The type of the disease was not severe. The disease soon disappeared with a change in the source of the water supply. In the crowded town of Moratuwa enteric fever is endemic, and out of 704 deaths registered during the year 43 deaths were from this disease. At the Reformatory at Maggona during August and September several cases of enteric fever occurred among the juvenile offenders confined there. Eleven cases were transferred to the Kalutara hospital, and two of them died. The diagnosis in all cases was confirmed by Widal's reaction. Both the Principal Civil Medical Officer and myself visited the Reformatory twice, and were satisfied with the sanitary arrangements of the place. A medical officer was stationed at the Reformatory while the outbreak lasted.

Chickenpox.—This disease was widely distributed, and occurred chiefly in the town of Colombo, Mahara prison, Panadure, Kalutara, Henaratgoda, Veyangoda, and Hanwella. 1,057 cases were reported.

Smallpox.—In hospital two cases of smallpox remained over from the previous year. 122 cases were admitted, of which 32 died. No cases were remaining at the end of the year.

The first case admitted into hospital on the 19th January was a Malabar cooly from Cheku street, a recent arrival from India. The infection spread from this case to several parts of the city, especially Alutmawata, Grandpass, and Slave Island. The disease was stamped out in November. Two cases included in the admissions into Kanatta came from the port, one the chief officer from the ss. Hawick Hall from Calcutta, the other a lascar from the ss. Ville de la Cité from Marseilles.

A child suffering with smallpox was clandestinely removed from Colombo in the month of July to Wehera, a village in the Moratuwa district. This case died and was buried, and the cause of death attributed to measles. Two other cases occurred in the same house. Both these cases recovered. The parents of the child were prosecuted and fined. No other villages were infected. Two cases of

smallpox occurred in the town of Negombo; the first case was a trader who returned home from India and took ill a few days after. Both cases recovered. The usual precautions by vaccination, segregation, and observation were carried out successfully.

The following is the number of cases of smallpox, modified smallpox, and chickenpox treated and died in the Province during the year :—

				Total treated.		Total died.
Smallpox	...	...	...	76	...	32
Modified smallpox	...	...	...	46	...	—
Chickenpox	...	...	...	1,057	...	3

Cholera.—An outbreak of cholera occurred at Negombo at the beginning of the year, and continued up to the middle of March. There were 40 cases, with 32 deaths. The disease was introduced from Chilaw by a boatman who was being taken to Colombo ill with the disease. The patient, who was in a padda boat in the Negombo lake, was visited by a resident of Negombo, who contracted the disease. From this source it spread, the localities chiefly infected being Grand street and St. Joseph's street in the neighbourhood of the canal. There were 4 deaths from this disease at Wadduwa in the Panadure district, and 2 deaths in Waskaduwa and Kalutara; all these cases were traced to Negombo.

Ragama Camp.—There were six outbreaks of cholera during the year :—

				Cases.		Deaths.
First outbreak, July 5	...	...	...	2	...	1
Second do. July 11	...	...	...	13	...	10
Third do. July 16	...	...	...	1	...	0
Fourth do. July 20	...	...	...	1	...	1
Fifth do. August 7	...	...	...	1	...	1
Sixth do. October 20	...	...	...	1	...	—
Total				19		13

These cases occurred in gangs of coolies who came from infected areas. The total number of coolies who passed through the camp during the year was 34,280. Of this number, 3,623 were quarantined, having come either from cholera- or plague-infected areas.

Particular Disease.—During the north-east monsoon acute serous diarrhoea was prevalent in several parts of the Province. In Negombo town it lasted for two months, April and May. There were 52 cases, with 32 deaths. Specimens of excreta and spleen were forwarded for bacteriological examination, which did not prove them to be cholera. Similarly, it prevailed for two weeks, from 21st February to 4th March, at Egoda Uyana, a populous village in the Moratuwa district. There were 20 cases, with 9 deaths. Everything possible was done: a fresh supply of water from another locality was distributed as long as the disease prevailed, apothecaries were placed on special duty, and the needy provided with food. The disease was peculiarly confined to this village, which was exposed and by the seashore. In the convict prisons an unusually large number of cases occurred during the year. There were 31 cases, with 7 deaths.

Sanitary Condition of the Chief Towns.

Colombo.—Though the city maintained its reputation as one of the healthiest cities in the East, yet considerable sanitary improvements are required before it can be pronounced an ideal city. The appointment and assumption of duties of two highly qualified medical officers of health for the city, it is expected, will result in improving its sanitary condition and removing all sources of nuisance. The duplication of the main now in hand will give the city a larger and more regular supply of water, and it is hoped that all wells in the crowded parts of the city will then be closed, as the source of enteric fever so prevalent in the city has always been traced to contaminated water or milk. The cumbersome system of conservancy now worked by the Municipality will soon be displaced by the Mansergh system of water carriage, so far at least as the crowded parts of the city are concerned.

Panadure.—This town remains the same year after year, and I have nothing new to chronicle, except to state that the sooner a Board of Health is appointed the better it will be for the residents of the place.

Moratuwa.—I cannot do better than refer to my remarks of the previous year.

Negombo.—A considerable number of large surface drains were constructed in this town with the view of carrying off the rain water which collected and lodged on the surface for days. Every endeavour is made to improve the drainage of this low-lying town. The source of water supply for drinking is from wells outside the town, and is of good quality. A scheme for obtaining water from Dandugama-oya, 8 miles from town, is under consideration.

Kalutara, Avisawella, and Minuwangoda.—Nothing new to record.

Other Institutions.

I annex reports from the Surgeon in Charge and the staff of the General Hospital, the reports of the Superintendents of the Lying-in Home and Leper Asylum, and the Medical Officer of the Lady Havelock Hospital. I annex also the report of the Port Surgeon.

The Port.—One case of suspected plague in a cabin boy on board the M. M. ss. Polynesian, evidently infected at Hongkong, and manifesting symptoms immediately after the ship left Singapore, was detected on her arrival. The vessel was placed in strict quarantine, took in coal and water by means of her own crew, and left for Galle. The patient was admitted into the plague hospital there, and a party of thirty Chinese passengers for Ceylon were landed and placed in quarantine. The ship then left. I inspected this case with the Port Surgeon.

The Jails.—The convict prisons were maintained in a good sanitary state. The drainage of the Welikada prison was completed, and extra windows were put into the Mutwal prison wards to improve their ventilation. Pneumonia, which usually affected the prisoners at Mutwal, was entirely absent this year, whereas an outbreak occurred in the Mahara prison. There were in this prison

24 cases, with 15 deaths. Diarrhœa and dysentery, as in previous years, formed the greatest admissions into the hospital, and a percentage of the diseases to the strength of the prisons for the past five years shows :—

Year.					Diarrhœa. Per Cent.		Dysentery. Per Cent.
1898	...	...	...	...	5.10	...	3.08
1899	...	...	...	...	3.08	...	4.73
1900	...	...	...	...	5.76	..	5.77
1901	...	...	...	...	4.25	...	3.95
1902	...	...	...	...	4.68	...	3.72

Vaccination.—Twenty-nine vaccinators, including one female vaccinator, were employed in the Province, and of these eight worked in the city of Colombo. One extra vaccinator was employed during the outbreak of smallpox at Colombo. Two out of the twenty-nine vaccinators worked on estates.

During the year 50,076 persons were vaccinated, 43,043 primary and 7,033 re-vaccinations. Of the 43,043 primary vaccinations, 23,951 were males and 19,092 females. The ratio of success to those inspected were 95.33 for vaccinations and 78.02 for re-vaccinations. In the city 17,174 persons were vaccinated, an increase of 677 over the previous year.

The work of calf vaccination had been carried on under difficulties owing to unsuitable premises and insufficient space. 148 calves were vaccinated, and 3,914 tubes of glycerinated paste prepared, which was sufficient not only for local demands, but served to supply other Provinces, private practitioners, the Military, and the Boer and Ragama coolie camps.

A vote has been included in the estimates for 1903 for erecting a central vaccine dépôt, and it is hoped that the work will be completed before the expiration of the year.

(2) CENTRAL AND NORTH-CENTRAL PROVINCES.

These Provinces are under the supervision of Colonial Surgeon J. Craib, M.D., whose report is subjoined :—

In submitting my annual report for the year 1902, I have the honour to state that, excepting for an outbreak of cholera on Pallekele estate, the general health of the two Provinces under my charge has been fairly satisfactory. There was no smallpox during the year, but a few cases of chickenpox were reported from Hanguranketa and Galagedara districts. Measles, too, prevailed in a few of the districts, but not to any extent.

Population.

The estimated population for the year, as per figures obtained from the Registrar-General, is as follows :—

				Central Province.	North-Central Province.
Population (at the middle of 1902)	...	...	...	626,278	79,452
Births registered, 1901	...	...	...	13,045	3,803
Do. 1902	...	...	...	14,582	3,404
Deaths registered, 1901	...	...	...	12,467	3,041
Do. 1902	...	...	...	11,507	3,396
Birth-rate per 1,000, 1901	...	...	...	32.4	47.9
Do. 1902	...	...	...	36.1	38.1
Death-rate per 1,000, 1901	...	...	...	30.1	38.3
Do. 1902	...	...	...	29.4	42.7

Prevalence of Sickness.

The diseases most prevalent were malarial fever, diarrhœa, and dysentery, pneumonia and catarrhal affections, rheumatism, and cutaneous affections.

Malarial Fevers did not prevail to such an extent as in preceding years, and did not require the employment of itinerating medical officers, as it at no time assumed an epidemic form.

Parangi prevailed in the North-Central Province and adjacent parts of the Central Province, and appears to be on the decrease, judging from the reduced number treated for the year.

Diarrhœa and Dysentery existed among the estate labourers, especially during the wet seasons, and was principally due to dietetic and climatic causes; neither of them assumed an epidemic form.

Respiratory Diseases and Rheumatism were caused by exposure to changes of temperature, and were mainly seen in the higher districts of the Central Province.

Anchylostomiasis occurs largely among the Tamil labour force, and is constantly being imported from the coast by new arrivals, and is now extending to the villagers, especially among those who work or reside on the estates. The causes are due to pollution of soil and water, by fecal matter, and if the native could only be educated to use latrines this disease would be considerably reduced.

Relative Mortality in the Different Seasons.

Owing to the absence of the necessary data from the Registrar-General under this heading, I regret I am unable to furnish any statement.

Meteorological Conditions and Effects on Public Health.

The two first quarters offered no special features for framing my observations, but the two last quarters of the year were characterized by exceptionally wet weather, and consequently gave rise to much sickness in the several districts. Respiratory, intestinal, and arthritic affections prevailed largely, while malarial fevers on the other hand succeeded the wet seasons and caused the usual outbreaks of fever to appear.

Particular Diseases.

There was no smallpox in the two Provinces. Chickenpox existed in Matale, Hanguranketa, Maturata, Rattota, Nawalapitiya, Lindula, Kandy, Gampola, and Nuwara Eliya Districts. 649 cases were reported from the Central Province, and only three from the North-Central Province.

Cholera occurred on Pallokele estate, having been introduced by new arrivals; it began on 12th October and ceased on 9th November. It, however, broke out afresh in December, and continued until beyond the end of the year. There were in all 22 cases up to 31st December, with 12 deaths.

In every instance the cases were seen by the Colonial Surgeon, who took active steps to prevent the spread of the disease.

A few epidemic cases of measles also occurred throughout the two Provinces.

Leprosy.—A few cases were reported from various districts, and all were either transferred to the Leper Asylum at Hendala or returned to the Coast, as the subjects were mostly Malabars or Coast Moors.

Mumps occurred in the Kandy District and Bogambra jail. In the latter there were 53 cases, all of whom were transferred to the Infectious Diseases Hospital for treatment. This disease was introduced into the jail by local admission.

Sanitation.

Sanitation was on the whole fairly satisfactory. Several improvements were effected during the year under review, and damaged drains were replaced by egg-shaped cement ones. Several Horbury latrines were supplied. The scavenging was given out on contract, and was satisfactorily done. In addition, the several points indicated in my last report were continued to be carried out during this year, and contributed thereby to a better state of sanitation. The water supply, however, still continues to be a subject of discussion, and nothing was done to improve it during the year.

Kandy.—Water supply remains the same. Drainage remains unimproved. Alleys still numerous and insanitary with defective drainage. Cesspits, where practicable, were replaced by dry-earth system. Overcrowding continues in alleys, laundries, and eating-houses; slaughter-houses are satisfactory, and were regularly inspected by the Municipal officers. Conservancy of town is satisfactorily performed.

Matale.—Drainage still defective. Water supply inadequate. It is contemplated to acquire an estate, where the water supply is pure, wholesome, and sufficient. Several cesspits still remain, but are being gradually replaced by Horbury latrines and dry-earth system.

Gampola.—Drainage is being generally improved upon, but is still defective.

Nawalapitiya.—Water supply sufficient, and is carried to the town by pipes. Drainage still defective, but is gradually improved as funds permit. A few public latrines were erected.

Hatton and Dikoya are conjointly managed by a Local Board. Drainage is being improved upon, though still defective. Horbury latrines were erected. Water supply is still very defective, and is polluted by surface drainage unless obtained from wells.

Maskeliya, Kotagala, Talawakele, and Lindula.—The drainage in these towns has been improved, and Horbury latrines were erected. The water supply, however, is still defective, especially in the two latter towns.

Nanu-oya remains the same, with the exception of a Horbury latrine being provided.

Nuwara Eliya remains much the same. Latrine accommodation still insufficient, and drainage defective.

Kadugannawa.—Drainage much improved, but still defective. Water supply is obtained from wells.

Dambulla, Rattota, and Wattegama.—Drainage unimproved, and no latrine accommodation has been supplied. Water supply unsatisfactory and defective.

Anuradhapura.—Drainage defective, but being generally improved. Increased latrine accommodation was provided. Conservancy of town is satisfactorily carried out.

Mihintale remains unimproved.

Vaccination.

During the year vaccination in the two Provinces was satisfactorily carried on by medical officers, apothecaries, and vaccinators. The female vaccinator operated amongst the Moorish and other communities in Kandy, Matale, Gampola, Nawalapitiya, and Hatton.

The total number vaccinated was males 12,228, females 11,819, total 24,047, showing an increase of 2,257 on the previous year. There were only 16 re-vaccinations, with a percentage of 56.25 success. The percentage of successes in primary vaccination was 96.01.

There were 57 reports against headmen and 169 cases of prosecutions of defaulters.

Animal Vaccine Depot.

Fifty-five calves were vaccinated, with 1,245 successful vesicles. 1,195 tubes of lymph were collected, and all were issued to the several vaccinators.

Jails and Jail Hospitals.

Kandy.—The number of prisoners confined in the Bogambra jail during the year was 2,165, and in the old jail 1,144. The daily strength was 412.12, and 59.96 respectively. There was no overcrowding in either of the jails. The number treated during the year was 807, giving a daily average of 20.83, with a percentage of deaths of 3.34. The diseases most prevalent were bowel complaints, respiratory diseases, fever, mumps, and chickenpox. All the infectious diseases were transferred to the Infectious Diseases Hospital, Kandy. The general health of the prisoners during the year was, on the whole, satisfactory.

Anuradhapura Jail.—156 were confined during the year, and the daily average strength was 10·22. There were 12 cases treated during the year, and the average daily sick was 29. The diseases most prevalent were dysentery, fever, and diarrhoea. There was only one death for the year.

Nuwara Eliya.—Health of prisoners was satisfactory. There were 52 cases treated, daily average sick being 1·38, with no deaths, and the daily average strength of the jail was 32·03.

Hospitals and Dispensaries.

The Civil Hospital, Kandy, has had several improvements effected during the year, viz., a new dysentery ward for females was built and opened. Several wards had the old tiles removed and Calicut tiles substituted, and the corridors and verandahs were cemented.

Matale Hospital.—Three new permanent wards were built and nurses' quarters provided. The administration block and dispenser's quarters are in course of erection. The old nurses' quarters were converted into a ward.

Gampola Hospital.—Nothing has been done to this institution during the year. The temporary wards should be replaced by permanent ones, as they are in a dilapidated condition.

Nawalapitiya Hospital.—An extra ward for females is needed.

Teldeniya Hospital.—Two new wards for male and female diarrhoea cases are required, as the existing accommodation is insufficient.

Dikoya Hospital.—This hospital is insanitary and beyond repair, and a new one should be built at an early date.

Dimbula Hospital.—An extra room for dispenser is required.

Maturata Hospital.—This new hospital was opened during the year.

Uda Pussellawa Hospital.—The old building should be replaced by a new permanent one, and new medical officer's quarters built.

There was only one new dispensary opened during the year, viz., Mendugoda. The following dispensaries should be replaced by new permanent buildings, viz., Galawela in the Central Province, and Yakalla, Tambuttegama, Eppawela, and Nochchiyagama in the North-Central Province.

(3) NORTHERN PROVINCE.

This Province is under the supervision of Acting Colonial Surgeon F. G. Spittel, L.R.C.P. and L.R.C.S., whose report is subjoined :—

In submitting my annual report for the Province under my supervision for the year 1902, I have the honour to state that I assumed duties as Acting Colonial Surgeon on the 13th June, 1902.

Population.

The estimated population for the three districts of this Province for the year is 348,789. The number of births registered was 13,301 and deaths 9,392. The birth-rate per 1,000 was 38·12, and the death-rate 26·92.

The following table supplied by the Provincial Registrar gives the particulars for each of the three districts :—

			Jaffna.				Mannar.				Mullaittivu.
Population	...	{	1901	...	305,809	...	24,885	...	15,186		
		}	1902	...	308,675	...	24,978	...	15,136		
Births	...	{	1901	...	12,985	...	942	...	660		
		}	1902	...	11,764	...	979	...	558		
Deaths	...	{	1901	...	7,134	...	1,185	...	648		
		}	1902	...	7,898	...	886	...	608		

Prevalence of Disease.

With the exception of an outbreak of cholera that occurred during the previous year and continued till this year, the health of the inhabitants has been satisfactory.

Malarial Diseases.—Malarial fever is endemic in the Northern Province, and prevails to a great extent after the burst of the north-east monsoon during the first and last quarters of the year. All types of the disease occurred, the most prevalent being quotidian and tertian. The returns of the different hospitals and dispensaries show that 43,300 cases were treated, against 40,831 cases the previous year, or an increase of 2,529. The largest numbers were treated at Pallai, Valuvettiturai, Jaffna, and Silavaturai.

Diarrhoea and Dysentery.—These diseases are most prevalent during the wet season from October till January. They are principally attributable to climatic changes, impure water, and unwholesome food. During the year 3,411 cases were reported from all hospitals and dispensaries of the Province. The largest number (539) was reported from Pallai.

Parangi.—This disease still prevails to a great extent, especially in the Vanni. The total number treated during the year was 1,586, of which 210 were treated at Kokulai. The places which are quite free from the disease are Delft, Kayts, Marichchukaddi, Nainativu, Vilankulam, Pallai, Pungulativu, and Valuvettiturai. A very small number of cases were reported from Batticotta, Jaffna, Palavarayan-kadu, Point Pedro, Punakari, Puttur, Silavaturai, Vankalai, and Vidattativu. Most of the cases treated in these stations were the inhabitants of other places who went to the dispensaries for treatment while passing them.

Itch.—This disease prevails to a great extent in the northern parts of the Province, especially in Jaffna and Point Pedro.

Pneumonia and Bronchitis prevail to some extent generally during the wet months, and are due to sudden changes of temperature. 345 cases of pneumonia were reported from twenty-four stations, of which 58 were reported from Kayts and 56 from Pallai.

Relative Mortality in the different Seasons.

In this Province practically there are two seasons, the wet and the dry. The wet season begins after the burst of the north-east monsoon in October, and lasts till February, the rainfall being highest in November and December. Although after the setting in of the south-west monsoon there are occasional showers of rain, the dry season may be said to begin in March and end in September.

The mortality is highest during the first and last quarters of the year; this is due chiefly to the prevalence of malarial fever, chest affections, and bowel complaints. The third quarter, which is the hottest part of the year, is the healthiest, and usually the death-rate during this quarter is low.

Particular Diseases.

Cholera, which broke out in the village Achchuveli on the 1st and at Kayts on the 11th December, 1901, continued till this year, and ended almost simultaneously on the 13th and 14th January. From 1st January 7 cases occurred at Achchuveli, of which 4 proved fatal, and at Kayts there were 29 cases, with 14 deaths.

Smallpox.—Two cases of smallpox occurred in the Province during the year, one at Manipay and the other at Tillupulli. The case at Manipay was reported on the 10th February. The patient, a resident of Manipay, visited Penang, from where he returned to Colombo on the 26th January, and came to Manipay on the 30th of the same month. On the 4th February fever set in, followed by the eruption of the disease. The case at Tillupulli, a resident of that village, went to Colombo, where he remained for three weeks, and embarked in the ss. Lady Gordon on the 7th March and proceeded to his village the same day. He was seized with the disease on the 21st of the same month. Both patients were promptly removed to the Infectious Diseases Hospital, and were discharged cured. The inmates of the houses occupied by the patients were quarantined; they as well as the people in the neighbourhood were vaccinated, sanitary measures were vigorously carried out, and the disease in both villages was at once stamped out.

Measles, Mumps, and Chickenpox were reported from several stations; in most of them the cases were sporadic, and nowhere did they prevail to any great extent.

Fish Poisoning.—Six cases of fish poisoning occurred on the 13th October in the adjoining villages Alvai and Karavady, which are situated two miles south of Point Pedro. All the patients, a few hours after partaking of some fish which was obtained from the Point Pedro market, were seized with gripe, dizziness, vomiting, and purging. One expired within nine hours after the symptoms set in, and three within eighteen hours; the rest recovered, and were quite well on the third day. It was not possible to identify the fish, as it was sold cut up in small pieces.

General Sanitary Condition of the Province.

Jaffna is the only town in the Province in which some system of sanitation is carried on, and even here the system can be much improved. Although several attempts have been made, no Municipality or Local Board has yet been established. The sanitary condition of several localities is anything but satisfactory. The fishers' quarter, Karaiur, seems to be the most insanitary part of the town. This locality is greatly overcrowded, the houses are small and ill-ventilated, the high cadjan fences round them and large trees shut out sunlight and prevent the free circulation of air. Towards the close of the year in this part of the town two latrines were erected, but the people, who never before were accustomed to use latrines, do not go to them, and the result is that the seashore, the roadside, and a plot of land in the vicinity are polluted with excreta in the same way as it was before the latrines were built. With the object of preventing the overcrowded state of Karaiur, the reclamation of about 13 acres of the sea was taken in hand some years ago, but it may take years before the work is completed.

The water supply of the town is very unsatisfactory. Water of fairly good quality can only be procured from a few wells. There are numerous other wells, but the water in them is brackish and not fit to be used for drinking.

Vaccination.

Vaccination was carried out throughout the year by seven vaccinators. The medical officers and apothecaries of the different dispensaries also vaccinated from time to time whenever subjects were procurable. The work of the vaccinators was frequently inspected by the Inspector of Vaccination and found to be satisfactory.

During the year 10,444 persons were vaccinated, 5,356 males and 5,088 females. Of these, 6,768 were operated upon by the vaccinators and 3,670 by the medical officers and apothecaries.

Of the number vaccinated by the vaccinators, 6,059 were successful, 392 unsuccessful, and 317 unknown. Of the number vaccinated by the medical officers and apothecaries, 3,178 were successful, 423 unsuccessful, and 75 unknown. The percentage of successful to total inspected was 91.89. The percentage of successful to total inspected by the vaccinators was 93.92, and by the medical officers and apothecaries 88.25. Taking into consideration that vaccination had to be suspended during the months that fever prevailed to a great extent, I think the number of subjects operated upon is satisfactory.

The preparation of calf lymph at the dépôt was carried out throughout the year, with satisfactory results.

Other Observations.

The only jail in the Province is the one in the Jaffna town. In it there is accommodation for 217 prisoners. The jail hospital consists of two wards, with six beds in each. The jail was at no time overcrowded, and the largest number confined on any one day was 128.

During the year 386 persons, convicted and unconvicted, were lodged within the jail, of whom 10 were females. Three persons were placed under observation, of whom one was insane.

There were 84 admissions into the hospital during the year, but not a single death occurred. The prevailing diseases were diarrhoea and malarial fever, of which there were 43 and 16 cases respectively.

Friend-in-Need Society's Hospital, Jaffna.—In this institution were treated during the year 1,631 patients, of whom 49 died, the percentage of deaths to total treated was 3.0. The prevailing diseases were malarial fever, malarial cachexia, general debility, and injuries. At the dispensary attached to this hospital 8,056 cases were treated. The total number of visits (first and subsequent) was 5,067. The prevailing diseases were malarial fever, worms, itch, rheumatism, diarrhoea, and dysentery.

(4) SOUTHERN PROVINCE.

This Province is under the supervision of Acting Colonial Surgeon W. E. Rudd, M.B., whose report is subjoined :—

I was placed in charge of the Province on 17th March, 1902, succeeding Dr. Keith, who went on leave and retired in August.

The estimated population for the year 1901 was 561,315, for 1902 was 569,944, increase 8,629.

Year.		No. of Births.		No. of Deaths.		Birth-rate per 1,000.		Death-rate per 1,000.
1901	...	23,342	...	14,937	...	41.584	...	26.610
1902	...	25,686	...	14,544	...	45.2°	...	25.7°

* Obtained by taking average of the three districts of Southern Province.

General Health.

There were outbreaks of serious epidemic disease at five different parts during 1902 :—

(1) At Galle two cases of smallpox were reported on a steamer in February, and were treated at Bathfield House.

(2) At Hiniduma, 36 miles from Galle, 21 cases of cholera occurred, with 4 deaths, in February.

(3) At Ambalangoda, two cases of smallpox in March. Here a man with the disease in a state of delirium escaped from his house and took refuge in an ambalam, a mile or so away, where he was found. He was immediately removed into a hut in an adjacent garden, which was far more convenient for isolation than his own house; and though the owner of the house objected to a certain degree, it is evident that in a crowded locality like this one the most convenient place must be chosen for the safety of the general public. No other cases spread from this nor from the other case.

(4) Smallpox was found in a man in the Main street, Weligama, on 14th November, twelve days after the eruption appeared. The patient was taken away 1½ mile off, and all "contacts" were put in another hut apart. Cases occurred frequently till the 2nd December; after that no other cases occurred there. There were 13 cases, with 2 deaths, and six houses were affected, all close together. Three vaccinators were sent to work in the town and adjacent parts, and I visited Weligama twice a week to check their work by the direction of the Principal Civil Medical Officer.

(5) At Matara a girl with smallpox was found on 2nd December, who was traced from Weligama with her mother, who also unfortunately contracted the disease and died apparently from diarrhoea more than from smallpox.

The chief diseases here are malarial diseases, parangi, ulcers, dochmius duodenalis, and in some parts outbreaks of dysentery occur. Leprosy is found in most parts.

Malarial Disease.—This is the most prevalent and important disease at present, though probably the time will come when it will be less important than others. By this is meant that it can and ought to be controlled by means of some little trouble in checking it, and the only question is, What are the best plans for the purpose?

In nearly all the resthouses of this Province is a notice of the cause of malarial fever, and doubtless it is beneficial, but the chief point of importance is to see that measures are carried out to check the breeding of mosquitoes at any spot close to a dwelling-house. Medical practitioners should be expected to inquire into the existence of breeding-places of the anopholes at the time of outbreaks or expected onsets of the disease, and patients and their friends should be always warned of the manner the disease arises and spreads. It seems possible thus to check the extensive outbreaks which occur nearly every year at certain times which correspond to the rainy season or a few weeks after the onset of the rains. Malarial fever is scarce or absent in the dry seasons, which differs slightly in the Balapitiya and Hambantota Districts.

Dysentery.—This disease, which is usually troublesome, coming in outbreaks and sometimes attacking half the inhabitants at least of a village, has not prevailed much in 1902. Only one really severe outbreak occurred at Bentota, and an officer was sent there in February, March, and April to treat the cases. The villagers prefer to be treated by their vedaralas for dysentery, and I believe the disease is thereby spread more than it need be.

The numbers reported at Bentota were :—

		Seen by Itinerating Officer.		Treated by Vedaralas.		Total.
Patients	...	85	...	146	...	231
Deaths	...	5	...	65	...	70

A smaller outbreak at Talpe shows these figures :—

		Seen by Itinerating Officer.		Treated by Vedaralas.		Total.
Patients	...	50	...	60	...	110
Deaths	..	1	...	8	...	9

Parangi is still very prevalent, and is said to be spread by the apathy or ignorance of the villagers in their mode of treating cases, the healthy and sick living in close contact, *e.g.*, if in a house with five people one person contracts the disease, at least three of the others will get the complaint from the first case, apparently without any effort to prevent this. The disease was found chiefly in the Matara and adjacent districts, and a few cases in the Baddegama and Udugama districts, but at Hiniduma only one case, and it will be interesting to see if any spread occurs.

Dochmius Duodenalis is found chiefly among Malabar coolies, but it is seen at Tangalla and Hambantota also, where the patients are mostly Sinhalese and Moors and Malays. The mortality is liable to be high because the patients will not come to be treated early in the course of the disease, and only enter hospital when the disease is in a dangerous state.

Measles is not a common disease here.

Chickenpox, a harmless disease usually, is the cause of harm very often by smallpox being mistaken for it, either through ignorance or fear on the part of the patient's friends. The idea that a case of chickenpox need not be reported to the sanitary authorities is dangerous as well as illegal, and was shown in the outbreak above-mentioned of smallpox at Weligama, when the case was supposed to be chickenpox and not reported till twelve days after the eruption had begun, and for that reason only 12 other cases contracted the disease from the first one, these being the only cases affected, with a total of 13.

Leprosy.—The new Ordinance came into operation at the beginning of 1902, and I made arrangements to inspect all lepers brought to the stations of qualified medical officers only, writing previously to the Government Agent and Assistant Government Agent about it. The plan seemed easy to carry out, but it did not work as satisfactorily as expected for these reasons :—

- (1) The distance may have been too great for lepers to travel to the hospital or dispensary when willing to go.
- (2) Some lepers were too ill to go.
- (3) Some, I heard, refused to go.
- (4) Some cases of skin disease were mistaken for leprosy, and they had a journey for nothing.
- (5) Some cases disappear either before the inspection or after.

Mortality.

It is striking that the mortality in this Province is reported as not high, the diseases being many and varied, and the general health or strength of the people is not robust. Dysentery and malarial fevers are the chief causes of death.

Sanitation.

The general sanitary condition of the Province is on the whole improved, but a good deal remains to be done, especially in the outlying districts, where the people are apathetic, and headmen do not appear to insist on their attention to the surroundings. The general complaint of the medical officers is that sanitary requirements are unattended to, gardens are allowed to be overgrown with jungle, accumulations of filth allowed to exist, absence of proper wells and a good water supply, want of latrines, and the contamination of surface wells by the drainage of polluted gardens, and the want of proper burial places.

The sanitation of Galle is in the hands of the Municipality, and a special medical officer is in charge. The water supply is still of a doubtful nature. The dry-earth closet system is being extended through the Fort.

Infectious Hospital.—The Government has decided to build a temporary Infectious Diseases Hospital, which was refused for a long time, and plans have been made for three separate buildings for three diseases : smallpox, cholera, and chickenpox.

Matara is in a fairly satisfactory condition as to sanitation.

Tangalla.—The water supply is defective, being chiefly obtained from two wells near the hospital, on one side of the town. One well has pure water and the other has not, and when the water is exhausted, which happens often in times of drought, it has to be carried some miles.

Hambantota.—A water supply is required, as it is obtained now from surface wells, and is slightly brackish.

Balapitiya.—The Sanitary Board established in 1901 is making progress. A site for a cemetery and market-place was fixed on by the Government Agent and myself in April last.

Hospitals.

Government Civil Hospital, Galle.—The chief diseases treated here were malarial fever and cachexia with debility, parangi, dysentery, and diarrhoea, rheumatism, abscess, phthisis, and syphilis. The highest mortality was from malarial cachexia, diarrhoea, dysentery, and phthisis.

The following improvements were completed during the year :—New kitchen, store-rooms, two old kitchens changed into a ward, nurses' quarters had an additional room by changing the ward upstairs into a large sitting-room, new bathroom and latrine were added ; covered ways from ward No. 2 to women's ward, and from ward No. 1 to ward No. 7 (medical), also from women's ward to new ward, thus enabling any one to go round the hospital under cover ; buttresses to the outer wall with drain inside in medical officer's garden ; glass to shutters in upper verandah and window to private ward ; and a boundary wall at the back of the hospital.

Infectious Diseases Hospital.—There were 19 cases admitted here : 2 smallpox, 16 chickenpox, and 1 suspected plague, with no deaths.

Hospital for Women.—69 cases were admitted. Of these, 50 were for gonorrhoea, 2 for primary, 6 for secondary and 1 for tertiary syphilis, 10 for ulceration of vagina.

House of Observation.—42 cases were treated, of which 15 were sent to the Colombo Lunatic Asylum, 25 discharged, and 2 remained.

Jails.—The prisoners of war, who were housed in the Hambantota jail, were all sent away. The other jails are at Galle, Matara, and Tangalla. Only the Galle jail has a special medical officer, who does judicial work as well.

Matara Hospital.—The chief diseases treated are parangi, ulcers, anæmia, and malarial diseases. Mortality is mostly due to diarrhoea, malarial cachexia, debility, dysentery, and enteric.

Tangalla Hospital.—The chief diseases were malarial fever and cachexia, injuries, ulcers, parangi, worms, and skin diseases. The mortality was highest in cases of respiratory diseases, debility, and wounds ; there were 13 deaths out of 308 cases. A notable injury causing death was a bite from a crocodile, and one case of acute yellow atrophy of the liver was admitted.

Hambantota Hospital.—Malarial diseases, ulcers, injuries, skin diseases, and worms were most prevalent, and deaths were caused chiefly by dysentery and diarrhoea, malarial fever, and respiratory diseases.

Balapitiya Hospital and Dispensary.—The most prevalent diseases are worms, malarial fever and cachexia, injuries, ulcers, and skin diseases. Deaths are mostly due to diarrhoea, dochmias, dysentery, and carcinoma.

Deniyaya Hospital and Dispensary.—The chief diseases are dochmias, malarial diseases and debility, ulcers, dysentery, and syphilis. The deaths are chiefly due to dochmias and dysentery, a few from malarial cachexia, respiratory diseases, and phthisis.

Galle Harbour.—The Master Attendant, Galle, in May, wrote asking whether an inquiry could be made into the quality of the water obtained from Watering Point for the use of ships calling here, as in appearance it seemed rather doubtful. I inspected and reported on the water and reservoir, and found the water was clear and apparently pure, but the surface of the water in the tank required clearing of a green vegetable growth. The Public Analyst reported the water to be of good quality. The Acting Principal Civil Medical Officer gave directions that the water should be inspected every month and a report sent of it and the reservoir, which has been done since June last.

Disinfecting Shed.—A start was made with this in October last; a steam disinfector is used, placed in a building on the beach near the Fort. The work consists of disinfecting linen from vessels in harbour when the bill of health is foul, and destroying or trying to destroy rats in the cargo boats. No rats have been yet killed, but I found a dead lizard in one boat after disinfection, apparently suffocated. In Galle the boatmen do not live in the boats as they do in Colombo.

Vaccination.

Twelve vaccinators are employed in the Province; a female vaccinator works chiefly among the Moor women. Calf vaccination is carried on at the outdoor dispensary under the direction of the Assistant Superintendent of Vaccination, and a calf vaccinator helps in the work.

Vaccination is carried on once a week at each residential dispensary, but not at branch dispensaries, which are visited once or twice a week.

The results of the calf vaccination seem to be somewhat doubtful. Many cases of vaccination in the calf fail partly, that is, the vesicles do not seem to rise properly, which is almost worse than total failure, for the use of the calf is thus spoilt for re-vaccination. The seed lymph is sent from Madras. Recently an explanation or further account of the process of vaccination of the calves in Madras was sent to me, and I am looking forward to an improvement.

My wish and aim in vaccination is to try to have at least three-fourths of the population vaccinated, and, if smallpox breaks out anywhere, to set on as many vaccinators as necessary to vaccinate and re-vaccinate every one. This plan was tried, not without success, at the recent outbreak at Weligama and Matara. Prosecutions for offences against the vaccination laws are frequent here, and a small fine is imposed usually.

(5) EASTERN PROVINCE.

This Province is under the supervision of Colonial Surgeon H. A. Moraes, L.R.C.P. and L.R.C.S., whose report is subjoined:—

I have the honour to forward my report of the Eastern Province for the year 1902. I took charge on the 19th June.

Population, Births, and Deaths.

The population of the Province on the 31st December, 1902, was 177,698, which is an increase of 3,472 over that of the year 1901. The population of the Batticaloa District was 149,013, and of the Trincomalee District 28,685.

The total number of births was 7,841 and deaths 5,338. In the Batticaloa District the births were 6,754 and deaths 4,399, and in the Trincomalee District the births were 1,087 and deaths 939. The births exceeded the deaths by 2,503: in the Batticaloa District by 2,355, and in the Trincomalee District by 148. The total number of births registered shows an increase, and the total number of deaths a decrease, on the previous year.

The birth-rate per 1,000 was 44.13, and the death-rate 30.03. The birth-rate shows an increase of 1, and the death-rate a decrease of 1.95 on the previous year. The birth-rate in the Batticaloa District was 45.32, and the death-rate 29.52. In the Trincomalee District the birth-rate was 37.89, and the death-rate 32.73.

Prevailing Diseases.

The general health of the Province was satisfactory. The diseases most prevalent were malarial fevers and their sequelae, parangi, ulcers and other skin diseases, rheumatic affections, and diseases of the respiratory and digestive systems.

Malarial Diseases.—Malarial fever prevails more or less throughout the year, but most so during the rainy season, at the beginning of the first and the end of the last quarter. It did not prevail to the same extent as in the previous year, and did not assume an epidemic form. It was generally of the intermittent type, chiefly quotidian, though cases of the tertian type were also met with. In the hospitals and dispensaries, of all diseases treated, viz., 66,087, no less than 23,456, or a little less than a third, were cases of malarial fever. This number is, however, less by 14,342 than in the previous year. The rate per 1000 of the estimated population who were attacked with this disease was a little over 132. The largest numbers were treated at the following stations:—Eraur 6,419, Vallaichenai 4,296, Kattan-kudi 2,273, Batticaloa 2,210, Kalnunar 1,943, Pottuvil 1,528, and Maha-oya 1,332.

Parangi.—This disease comes next in order of prevalence. It has been reported from every station in the Province, and all nationalities of the native population are affected by it, and even some of the fairly well-to-do classes, though it is chiefly confined to the poorer classes. It is perhaps most severe in the interior or "vaanam," which is chiefly inhabited by the Sinhalese, and where it has been confounded with leprosy. The disease is kept up by the bad food, bad water, and insanitary habits of the people, who appear to be quite indifferent to its prevalence. The healthy freely mix with the sick, use the same water, which is very often from the only tank in the village, for drinking and washing purposes, and in which cattle are allowed to wallow. The total number of cases treated at

the several hospitals and dispensaries was 6,370, which is 1,122 more than in the previous year. The largest numbers were treated at the following stations :—Vallaichenai 1,347, Kokkodicholai 800, Eraur 717, Maha-oya 627, Kalmunai 527, Padirippu 410, Karankoditivu 380, and Batticaloa 302.

Ulcers and other Skin Diseases.—These were reported from all the stations, and 3,348 cases of ulcers and 3,627 cases of “other skin diseases” were treated.

Rheumatic Affections were prevalent throughout the Province. 2,491 cases were reported.

Diseases of the Digestive System, the principal of which were dysentery and diarrhœa, prevailed generally, but not in an epidemic form. 1,572 cases of dysentery and 897 of diarrhœa were reported.

Diseases of the Respiratory System occurred at all the stations. 1,670 cases were reported.

Leprosy.—This disease is very prevalent in the Kalmunai district, and many cases are to be met with in Batticaloa and the adjoining villages. It appears to be spreading in the Kalmunai district, and the medical officer reports that he has met with several cases which have not been reported by the headmen. The total number reported in the Province was 142; of this total, 63 are in the Kalmunai district, 42 in the Batticaloa District, and 37 in the Akkaripattu district. The disease seems to be confined to the district from Batticaloa southwards. North of Batticaloa it is seldom met with, only one case having been reported from Trincomalee and three from villages a few miles north of Batticaloa. The types met with are the tubercular, anæsthetic, nervous, and mixed, and the greater majority of those examined and reported upon were of a mild form. Some of the cases reported by the headmen as leprosy on examination were found to be cases of parangi.

Relative Mortality in different Seasons.

There are practically two seasons, the wet and the dry. The wet season commences with the setting in of the rains in October and continues till December, after which the nights are dewy and chilly and the days begin to get warm. This is the season when malarial fevers and chest and bowel complaints are most prevalent, and which is the unhealthiest. The mortality is consequently higher at this time. The dry season begins in May and lasts till September, and is the healthiest time of the year.

Meteorological Conditions and their Effect on Public Health.

The climate of the Eastern Province is generally hot and dry. The monsoon rains during the latter part of the year reduce the temperature to some extent, but the public health suffers owing to the outbreak of fever. The rainfall during this period is very heavy, and the country is flooded in many parts.

Remarks on Particular Diseases.

Cholera.—The apothecary of Tampalakam reported three deaths from this disease, but the medical officer of Trincomalee, who investigated these deaths, found that they were due to other causes.

Smallpox.—No cases were reported.

Other Infectious Diseases.—A few cases of chickenpox and measles were reported from a few stations. Three cases of enteric fever were reported by the medical officer of Trincomalee, one of which proved fatal. All three were among Europeans, one being a soldier, another a sailor from one of the men-of-war, and the other an employé of the dockyard. The origin of the infection could not be traced, and the disease did not spread.

General Sanitary Condition of the Province.

The general sanitary condition of the districts is not satisfactory. Owing to the nature of the land there are large low-lying tracts, which during the rainy weather are transformed into swamps and marshes. Many large villages, such as Kattankuddi, Nindur, Karankoditivu, Eraur, Vallaichenai, Toppur, Muttur, and Kinyai, are in a most insanitary state. The dwellings are low and dark, imperfectly ventilated, crowded together, and surrounded by a high fence, which shuts out light and fresh air. The compounds are used as open latrines, and rubbish accumulates in heaps. The drainage is very defective, and consequently during the rains there are many stagnant pools. The water in most places is obtained from tanks and shallow wells, and the one village tank is made to serve all purposes—washing, drinking, bathing, and watering cattle. Measures are being taken to improve the condition of these villages.

The sanitary condition of Batticaloa is fairly satisfactory, but much could be done to improve it. There is a Local Board of Health, but owing to want of funds improvements cannot be taken in hand. A better system of drainage is required, but owing to the nature of the land, which is flat, this is a matter of some difficulty. The compounds should be kept cleaner, and swamps and marshy grounds drained and filled up. The water supply, which is drawn from wells, is generally ample, but the wells during the dry season are apt to fail. A few public wells are provided. The water from the wells in some parts of the town is hard and brackish, but on the whole the water of the town is of fairly good quality.

Dr. Anthonisz reports as follows as regards Trincomalee :—

The drainage and conservancy of the town still remain very defective. More money has been voted for improvements in this direction, and I hope to be able to report great improvements likely to be carried out by the Local Board of Health during the year 1903. The water supply, though ample, is not always of the best quality. The water is hard, and during the driest season most of the wells get brackish. The public wells are well looked after and protected, but those in the compounds of the native population are very liable to get contaminated. Some parts of the town are overcrowded, more especially the fishers' quarters.

As regards Kalmunai, Dr. Phillips reports that the sanitary condition is on the whole satisfactory, though there is room for improvement. The drainage of the villages is defective, owing to the land being low and surrounded by swamps and neglected paddy fields. The water supply is fairly good. The Moorish villages are overcrowded, the houses being closely packed and built without any regard to adequate ventilation.

Vaccination.

Vaccination was carried on throughout the year. The staff consists of one Inspector of Vaccination, one calf vaccinator (who also does the town vaccination), and eight vaccinators. Two Moormen and one female vaccinator carry on vaccination exclusively among the Moorish population. The work of the vaccinators was regularly inspected by the Inspector. Vaccination was also carried on by the several medical officers and apothecaries at their respective stations.

During the year 8,106 subjects were vaccinated, which is less by 80 than in the previous year. Of these, 4,066 were males and 4,040 females; and of the whole number, 79 were infants, 7,391 children, and 636 adults. Of the total number vaccinated, 6,983 were successful, 945 unsuccessful, and 178 unknown. The number of re-vaccinations was 19, all of which were successful. The number vaccinated by the vaccinators was 6,638, and at the dispensaries 1,468. The percentage of successful primary vaccinations by the vaccinators was 90.19, and at the dispensaries 79.14. The preparation of calf lymph at the dépôt was carried on throughout the year, with satisfactory results.

Other Observations.

Jails.—There are two jails in the Province, one at Trincomalee and the other at Batticaloa. The former is only a lock-up. At the Batticaloa jail hospital 34 prisoners were treated, with one death from diarrhoea. The daily average in hospital was 1.40, and the percentage of deaths to total treated 3.23. The general health and sanitary condition of the jail was very satisfactory.

Hospitals and Dispensaries.—There are three Civil, one Field, and one Leper Hospitals and eighteen dispensaries, of which ten are permanent and eight visiting. A dispensary at Nadukadu was opened, and the one at Nilaveli was closed and one opened at Tiriyai in its place. All these institutions are doing good work, and are appreciated by the people. 1,653 received treatment at the several hospitals, and 64,434 at the dispensaries.

(6) NORTH-WESTERN AND SABARAGAMUWA PROVINCES.

These Provinces are under the supervision of Colonial Surgeon E. de Livera, M.B., C.M., whose report is subjoined :—

Population.

The population of the North-Western Province at the end of the year 1902 is estimated to be 361,373. There were 14,862 births and 10,995 deaths, giving a birth-rate of 41.12 and a death-rate of 30.39 per 1,000, as against a birth-rate of 40.78 and a death-rate of 25.43 in the previous year.

The population of the Province of Sabaragamuwa is estimated to be 327,903. There were 13,382 births and 9,347 deaths registered, and the birth- and death-rates respectively were 40.81 and 28.49 per 1,000, as against a birth-rate of 45.06 and a death-rate of 30.83 in 1901.

Prevalence of Sickness.

The general health of the districts in both the Provinces has been satisfactory. Two mild epidemics of cholera or acute diarrhoea occurred, one at Tambarawila, a village on the south-western border of the North-Western Province, close to Negombo, and the other at Ottapane, a village in the Puttalam District. A few isolated cases also occurred at Puttalam and in the Chilaw and Marawila Districts. Six cases occurred at Tambarawila, two of which proved fatal. The first person attacked was a man who had just returned from Negombo, where the disease was at the time prevalent. I visited the village on 21st April and, with the apothecary at Dankotuwa, took all the necessary measures for stamping out the outbreak. In the outbreak at Ottapane, which appears to have been a more severe one, six cases occurred, and five of them proved fatal. The outbreak lasted only from 13th to 19th March, and the prompt measures taken to prevent its spread proved successful. The infection could not have been traced to any source. Three cases, with three deaths, were reported from Wattakaliya, near Chilaw, but only one of these was seen by a medical officer. A case was reported from Irrattakulama in Marawila on 31st January. It ended in recovery, and it is doubtful whether this was a case of cholera or even acute diarrhoea. The patient had just arrived from Negombo. Another case, which ended fatally, was reported from Kattakadu, also in Marawila, on 16th March. The patient was a padda boatman, who had passed Negombo. The case was seen by the medical officer only after death. One fatal case was reported from Puttalam on 14th March, the patient dying the same day, and three cases again were reported between 28th and 30th June, and all proved fatal. The first to be attacked was an Indian coolie working in the satl pans, but several days had lapsed since his arrival from India. Two cases were reported from Battulu-oya on 3rd July, one of which proved fatal. I visited the place and helped the medical officer of Chilaw in dealing with the outbreak, but we did not succeed in tracing the source of infection. Lastly, one case of choleraic diarrhoea was admitted to the Infectious Diseases Hospital at Puttalam, and discharged after recovery on 31st October. There were in all 24 cases with 15 deaths.

Three cases of smallpox were reported from Puttalam between 22nd July and 5th August. The cases were all of a mild nature. The medical officer was not able to trace the source of infection in them.

No outbreaks of cholera or smallpox occurred in the Province of Sabaragamuwa, but 238 cases of chickenpox were reported from this Province: 4 from Karawanella, 28 from Kolonna, and 206 from twenty-nine villages in the Kegalla District.

In the North-Western Province five cases of chickenpox were reported from Dodangastanda, and sixteen from the town of Kurunegala.

Forty-three cases of measles were reported from Rakwana, five from Pelmadulla, and five from Godakawela, in the Province of Sabaragamuwa. None were reported from the North-Western Province, though I have no doubt cases have occurred.

The diseases chiefly prevalent have been the same as in previous years, viz., malarial fever and their sequelæ, parangi, ulcers, rheumatism, diarrhoea and dysentery, anchylostomiasis, pneumonia, bronchitis, phthisis pulmonalis, syphilis, skin diseases, and worms.

Malarial Fever.—This is by far the commonest of all diseases prevalent in Ceylon. In the North-Western Province it constituted about 44 per cent. of all cases treated in the hospitals and dispensaries, and in the Province of Sabaragamuwa 36 per cent. of all the cases treated were admitted for this disease. In the year under review the number of cases of malarial fever treated was a little in excess of the number treated in the previous year, but considerably less than the number treated in 1900. Only in a portion of Wannī hatpattu, in the villages near Nikaweratiya and Galgomuwa, was it found necessary to employ an extra apothecary to itinerate in the villages and treat cases of fever, and in Kitulgalla, in the Province of Sabaragamuwa, the vaccinator was employed in distributing fever powders among the villagers. In Kegalla and Rakwana the number of fever cases treated was less than in the previous year. Fever was most prevalent during the first quarter of the year, and it is worthy of notice that during that period the rainfall was the lowest recorded during the year. This excessive prevalence of fever in the first quarter may be accounted for by the fact of the rainfall having been high two months previously, in October and November of the preceding year, causing pools and puddles to be left in which mosquitoes could breed, as explained by the Principal Civil Medical Officer in his Administration Report for 1901.

The stations in which the largest number of cases of malarial diseases were treated were the following:—Nikaweratiya (4,561), Anamaduwa (4,441), Wariyapola (4,228), Marawila (3,639), Balalla (3,359), and Polgahawela (3,104), in the North-Western Province; and Parakaduwa (4,180), Karawanella (3,655), Balangoda (2,102), and Godakawela (2,048), in the Province of Sabaragamuwa.

Parangi is chiefly prevalent in the Katugampola, Wannī, and Demala hatpattus of the North-Western Province, and in the Kolonna and Atakalan korales of the Province of Sabaragamuwa, where the inhabitants are, as a rule, poor, and subsist on kurakkan and other equally innutritious food, and depend for their water supply on small tanks, which are apt to run almost dry during certain seasons, bad water and bad food being undoubted factors in favouring the progress of the disease, causing its recurrence after it has disappeared under hospital treatment, and preventing its cure. There has been a slight decrease in the numbers treated, as compared with those treated in the previous year, as the following table giving the numbers treated in the principal centres will show:—

				Numbers treated.	
<i>North-Western Province.</i>				1901.	1902.
Dandugamuwa	...	...	...	1,173	1,292
Nikaweratiya	...	...	...	3,875	3,202
Anamaduwa	...	...	...	3,008	2,477
Balalla	...	...	...	1,934	1,772
Kurunegala	...	...	...	1,156	1,115
<i>Province of Sabaragamuwa.</i>					
Godakawela	...	...	...	592	564
Kolonna	...	...	...	320	611
Total				11,146	9,858

Diarrhœa and Dysentery.—Ten per cent. of the cases admitted into the hospitals of the Province of Sabaragamuwa and 8 per cent. of the cases admitted into the hospitals of the North-Western Province were for diarrhœa and dysentery, and these were the diseases which contributed largely to increase the mortality in hospitals. There were 460 deaths out of 798 cases of diarrhœa and dysentery treated, giving a percentage of 55 deaths, in the hospitals of the former Province; and 118 deaths out of 450 cases treated, giving a percentage of 31 deaths, in the hospitals of the latter Province. Cases occurred at all seasons, and not in one season more than in another. A slight epidemic of dysentery occurred about the third quarter of the year in some villages in the Kegalla District, and 27 cases were reported from them. The villages were visited by the apothecaries at Nelundeniya and Mawanella, and the outbreak stamped out. Five cases were reported from a village called Dimbulwela in Godakawela.

Pneumonia.—There were 74 cases of this disease, causing 27 deaths, treated in the hospitals of Sabaragamuwa, and 159 cases, causing 57 deaths, treated in the hospitals of the North-Western Province, Kurunegala alone contributing 96 cases, with 29 deaths. The cases occurred mostly during the north-east monsoon, and the medical officer of Kurunegala states that the disease assumed almost an epidemic form in November.

Tubercle.—Cases of phthisis pulmonalis were found in all the districts. 138 cases, causing 43 deaths, were treated in the hospitals of the Province of Sabaragamuwa, and 43 cases, causing 14 deaths, were treated in the hospitals of the North-Western Province. The dampness of the climate in the former may account for more cases having occurred in it.

Anchylostomiasis.—This disease is prevailing to a large extent among estate labourers and other Malabars imported from India, but Sinhalese and Moor villagers are not exempt from it. Cases of this disease were treated chiefly in the district hospitals. 145 were treated at Balangoda, 108 at Karawanella, 17 at Kegalla, and 10 at Rakwana, and 51 deaths resulted from this disease.

Remarks on Particular Diseases.

Leprosy.—Four cases of leprosy were reported from Ratnapura, 26 cases representing about 11 patients, as some cases were entered in the books more than once at different times, were treated at Balangoda; and 15 cases representing 7 patients at Karawanella; one case was reported from Godakawela, and one from Kurunegala. Some of the patients have since died, and some have left the country, and some have been sent to the Leper Asylum, and a few are living at their own abodes, isolated as far as practicable. Several of the lepers were reported from a village called Bambarabotuwa in the Ratnapura District, and the majority of the remaining ones are estate labourers who have come from the coast of India.

Cancer.—There were 13 cases of cancer treated at the Karawanella hospital, and 3 at Kegalla, and 1 case was treated at Kurunegala, and 1 at Puttalam. Three of the cases have ended in death.

Enteric Fever.—In the Province of Sabaragamuwa 2 cases were treated at Godakawela, and both ended fatally; 1 case was treated at Karawanella, which also ended fatally; and 1 case treated

at Ratnapura recovered. In the North-Western Province 1 case was treated at Kurnegala, which ended in recovery ; and 2 at Puttalam, both of which died ; and 4 at Marawila, of which 1 proved fatal. It is not known how these cases originated.

The following tables give a comparative statement of the numbers treated in the different hospitals of the two Provinces during 1901 and 1902 :—

North-Western Province.

Name of Hospital.			Numbers treated.		Average Daily Sick.		Number of Deaths.		Percentage of Deaths to Total treated.	
			1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
Kurunegala	...	...	3,189	3,431	102.50	99.76	247	224	8.70	7.02
Puttalam	...	...	661	783	28.51	37.09	48	55	5.55	7.00
Chilaw	...	...	289	272	9.08	10.07	26	22	11.57	8.08
Marawila	...	...	816	801	34.25	33.38	50	51	7.19	6.36
Nikaweratiya	...	...	579	561	25.35	24.98	25	33	4.53	5.88
Dandugamuwa	...	...	450	555	20.05	23.17	12	24	6.88	4.32
Total	...	...	5,984	6,403	219.74	228.25	408	409	7.72	6.38

Province of Sabaragamuwa.

Name of Hospital.			Numbers treated.		Average Daily Sick.		Number of Deaths.		Percentage of Deaths to Total treated.	
			1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
Ratnapura	...	...	1,002	771	51.63	—	154	101	15.36	13.09
Balangoda	...	...	1,293	1,602	92.59	96.66	225	129	10.46	8.05
Karawanella	...	...	2,274	2,400	161.35	107.73	427	361	18.77	16.83
Rakwana	...	...	1,025	631	38.42	32.04	138	54	13.46	8.55
Kegalla	...	...	738	881	42.58	47.22	91	107	12.33	12.14
Kolonna	...	...	1,193	861	35.97	32.91	11	15	.92	1.74
Godakawela	...	...	637	565	27.69	22.47	22	25	4.01	4.42
Total	...	...	8,198	7,711	450.23	371.11	1,073	792	10.75	10.27

There were 1,951 estate labourers treated in the district hospitals, and there were 425 deaths among them, giving a percentage of 21.66 deaths to total treated.

There are 28 dispensaries and branch dispensaries in the North-Western Province, and the number of persons treated in them during 1902 was 142,915, and the number of visits paid 230,889. The amount of money collected was Rs. 3,924.03. There are 28 dispensaries, 1 branch dispensary, and 11 permanent itinerating stations in the Province of Sabaragamuwa, and the numbers treated in them were : persons 80,734, and visits 116,982. The amount collected was Rs. 1,576.28.

Meteorological Conditions.

In both the Provinces the highest rainfall was recorded in the last quarter, and the lowest rainfall in the first quarter of the year. The figures showing both the total diseases and malarial diseases treated were highest in the first quarter and lowest in the last quarter, which was the healthiest time of the year. There was a gradual decrease in the figures from the first to the last quarter. The figures indicating the rainfall, however, did not show a gradual decrease, as in the second quarter the rainfall was higher than in the first. The rainfall in the last quarter appears to have been unprecedented. In Karawanella, which may be taken to represent the Province of Sabaragamuwa, there was a rainfall of 87.21 inches during this quarter, the record for October, the wettest month, alone being 34.14 ; and in Kurnegala, which may be taken to represent the North-Western Province, there was a rainfall of 52.46 inches, the record for October being 20.27 inches. The total rainfall for the year was 215.16 inches in 1902, as against 160.45 inches in 1901, in Karawanella ; and in Kurnegala it was 110.80 inches in 1902, as against 94.96 inches in 1901. The wettest district was Kitulgala, where the total rainfall for the year was 239.67 inches.

Sanitary Condition of the Chief Towns.

Kurunegala.—Nothing has yet been done to improve the sanitary condition of this town. Steps are, however, being taken by the Local Board to provide water supply and drainage, which are its chief wants.

Puttalam.—A purer and more ample water supply is required. Swamps require filling up. The Moorish quarters are deplorably overcrowded.

Chilaw.—Sanitary condition has been much improved, but there is a good deal of overcrowding in some parts, especially in the fishers' quarters.

Marawila.—There is not much overcrowding, but the drainage is unsatisfactory.

Ratnapura.—No improvements have been made. The conservancy is insufficient, and the medical officer writes that the scavenging of the town might be considerably improved if more efficient supervision is exercised. The filter bed in the reservoir requires to be properly renewed.

Rakwana.—The drinking water of the town obtained from the polluted stream running parallel with the bazaar road, is objectionable. Two good wells and a couple of portable galvanized latrines should be provided.

Balangoda.—Supply of drinking water for the town is scanty. The whole population has to depend on a small well, which should be deepened and a pump fixed to it. Drains need much attention.

Karawanella.—Public latrines are needed at Karawanella and Ruanwella. Scavengers are also required to be employed at these places. The drains of Yatiyantota bazaar require to be properly constructed and cemented.

Kegalla.—There is no improvement in the sanitary condition. Wells, springs, and natural streams afford the source of water supply. The majority of the wells are uncovered and shallow. Drainage of the town is defective. Cement drains are required everywhere.

Vaccination.

There were 10,560 subjects vaccinated in the North-Western Province, with the following results: 8,775 successful, 598 unsuccessful, and 1,207 absent; and there were 11,781 subjects vaccinated in the Province of Sabaragamuwa, with the following results: 9,904 successful, 608 unsuccessful, and 1,269 absent. During the previous year the number of successful vaccinations was 9,237 in the North-Western Province, and 13,026 in the Province of Sabaragamuwa. The percentage of successful vaccinations in 1902 was 93·60 in the North-Western Province, and 94·21 in the Province of Sabaragamuwa. There were 33 re-vaccinations performed in the North-Western Province. Six vaccinators were employed in the North-Western Province, and eleven, including four estate vaccinators, in the Province of Sabaragamuwa, besides a female vaccinator, who worked in both the Provinces.

Jails.

There are three jails in the North-Western Province, at Kurunegala, Puttalam, and Chilaw, and two in the Province of Sabaragamuwa, at Ratnapura and Kegalla. Only short-sentenced prisoners and prisoners on remand and road defaulters were confined in these jails.

Port Duties.

The health officer at Kalpitiya inspected 163 boats. They were mostly from Jaffna, Mannar, and Negombo.

Other Observations.

The usual festival was held at St. Anna's church at Talavila in the Puttalam District in July last, where large numbers of people from all parts of the Island and from India assembled, but no outbreak of any disease occurred. Dr. A. B. Santiago was appointed to take charge of the medical and sanitary arrangements of the camp, and three assistants were placed under his orders. A temporary hospital was also put up, where 233 patients suffering from various diseases were treated. Two other medical officers were stationed on the road to the camp to inspect the gangs of pilgrims passing.

There were three new branch dispensaries opened during the year in the North-Western Province, at Hettipola, Katupota, and Rambodagala., and two new itinerating stations were established in the Province of Sabaragamuwa, at Panamura, and Tunkama.

A new ward for twenty-four beds, begun to be built in connection with the Kegalla hospital, was approaching completion at the end of the year, and a new additional female ward has been built at Rakwana.

I have inspected all the hospitals, dispensaries, and branch dispensaries (with the exception of one or two of the latter) in both the Provinces twice during the year, and some of them oftener.

(7) PROVINCE OF UVA.

This Province is under the supervision of Colonial Surgeon F. Oorloff, M.B., C.M., whose report is subjoined:—

Hospitals	...	Civil ...	...	...	...	1
		District	...	...	...	2
		Field or Parangi	...	...	...	3
Dispensaries	...	Civil ...	...	...	...	9
		District	...	...	...	9
		Estate...	...	...	...	12
Itinerating stations	...	...	...	...	...	10
Estimated population	{	1902 ...	...	...	...	186,801
		1901 ...	...	...	...	186,528
Births	{	1902 ...	...	...	...	7,968
		1901 ...	...	...	...	7,433
Deaths	{	1902 ...	...	...	...	6,982
		1901 ...	...	...	...	7,574
Birth-rate per 1,000...	{	1902 ...	...	...	...	42·6
		1901 ...	...	...	...	39·8
Death-rate per 1,000...	{	1902 ...	...	...	...	37·3
		1901 ...	...	...	...	40·6

Prevalence of Sickness in the different Seasons of the Year.

The general health of the Province during the year was satisfactory, and no infectious disease prevailed in an epidemic form. As in the previous year, the diseases most prevalent were malarial fever, dysentery, parangi, rheumatism, and respiratory affections.

Malarial Fever.—This disease was most prevalent during the north-east monsoon. In no place did it assume an epidemic character, and the cases that occurred readily yielded to treatment. The largest number of cases, viz., 1,638, was treated in Badulla in the hospital and at the outdoor dispensary. This number, however, was 433 less than that treated during the previous year. Excluding Welimada (the dispensary at which place was opened on the 16th April, 1902), Pingarawa, as in the previous year, had the smallest number of cases, viz., 324.

Dysentery.—This disease was at its height when malarial fever was most prevalent. The villages in which it occurred were promptly visited by the apothecaries of the respective districts. There were very few deaths from it, and it never assumed an epidemic form.

Parangi.—This scourge exists to a great extent in the following places in the Province, viz., Medagama, Bintenna, Badullawella, Buttala, Muppana, Tanamalwila, and Wedikumbura. I have no doubt that with the extension of irrigation, and the consequent amelioration of the condition of the people and the improvement of sanitation, there will be few victims to it.

Rheumatism and Respiratory Diseases.—As in previous years, these diseases were mostly prevalent during the first and last quarters of the year.

Relative Mortality in the different Seasons.—The following table gives the number of deaths registered during the year :—

No. of Deaths registered.			No. of Deaths registered.		
January ...	...	832	August ...	...	483
February ...	...	575	September ...	...	687
March ...	...	525	October ...	...	621
April ...	...	538	November ...	...	648
May ...	...	520	December ...	...	573
June ...	...	466			
July ...	...	514			
			Total ...	...	6,982

The mortality, as will be seen from the above figures, began to rise in September, and reached its maximum in January. The high mortality during the last quarter and in January was coincident with the rise in malaria and dysentery during the same period. Malaria and dysentery were the two diseases that chiefly helped to swell the number of cases and the mortality. The number of deaths during the year under review was 592 less than that during the previous year.

Meteorological Conditions and their effect on the Public Health.—The rainfall was heaviest during the prevalence of the north-east monsoon. The dry season corresponds with the south-west monsoon. During the wet months the diseases which chiefly prevailed were malarial fever, dysentery, and respiratory affections, and during the dry season parangi, chickenpox, sore eyes, and skin affections.

Particular Diseases that have recurred during the Year.

Cholera.—Two cases were reported, with one death. The first case was reported from Wewelhena Estate in August. The patient died in about twenty-four hours after the attack. The information reached me after the death and the burial. From the history given by the dispenser on Wewelhena (a man who has had experience of cholera), there was nothing to indicate that the case was one of simple gastro-intestinal irritation, and I am inclined to believe that it was cholera. Although every effort was made to discover the source of infection, we were unable to obtain any clue to it. Happily, no other cases occurred on the estate. The next case occurred on Ellawatta Estate in Pingarawa. The patient was a recent arrival from India, and the history of the case certainly pointed to cholera.

Smallpox.—Not a single case of this disease occurred in the Province.

Chickenpox.—This disease was reported from seven stations. The largest number, viz., 26, were treated in the Infectious Diseases Hospital at Haputale. The patients were coolies employed at the Boer Camp, Diyatalawa.

Measles.—Twenty-nine cases were reported from three stations. Of this number, 13 cases occurred among the coolies employed at the Boer Camp, Diyatalawa, and were treated in the Infectious Diseases Hospital at Haputale.

Acute Diarrhœa.—There were 18 cases of this disease reported, of which 5 proved fatal. They occurred in Buttala, Okkampitiya, and Kataragam. The particulars ascertained pointed to the cases being those of simple gastro-intestinal irritation induced by unwholesome food.

General Sanitary Condition of the Province.

There is room for improvement in the general sanitary condition of the Province. The defects have been brought to the notice of the Government Agent.

Badulla.—The water supply is good and sufficient, the water being conveyed to the town by pipes. The drainage continues to be defective. Public latrine accommodation is deficient.

Bandarawela.—A scheme for improving the water supply is, I understand, still under consideration. The drainage is defective, in that the cross drain which connects the two side drains along the main road is not paved. This leads to stagnation of water. The scavenging was satisfactorily done.

Haputale.—The water supply is good and sufficient. The sanitation was well looked after. There is much room for improvement in the drainage. Two additional public latrines were erected during the year.

Haldummulla.—The water supply is pretty good. The drainage is bad. Public latrine accommodation is wanting.

Koslanda.—The water supply is pretty good. The drainage is bad. The sanitation was well looked after. Public latrine accommodation is wanting.

Passara.—The water supply is pretty good. The drainage is bad. The sanitation was well looked after. Public latrine accommodation is wanting.

Lunugala.—The stream which supplies the town is liable to pollution. This could be remedied by the extension of the water service from the resthouse to the bazaar street. The drainage is defective. Public latrine accommodation is wanting.

Welimada.—The water supply of the town is derived from the continuation of the Uma-oya, which rises in Nuwara Eliya, and receives in its course of about 16 miles several tributaries. Water

from tea estates and the sewage of the Nuwara Eliya hospital flow into the Uma-oya before it is diverted into the channel known as the Uma-ela at the village Perawella, which is about 10 miles from Welimada. The water of the Uma-oya is not much used by the people of Welimada for drinking. The chief source of the water for drinking purposes is a stream which flows into the resthouse premises. It is desirable that deep wells properly protected from pollution should be built in the town, and also in all the villages in Yatipalata, to at least supply the inhabitants with wholesome water for drinking. The drainage is bad.

Vaccination.

Six vaccinators (four district and two estate) were employed during the year. In addition to this the medical officers and apothecaries carried on vaccination at the outdoor dispensaries. The work of the vaccinators was regularly inspected by the Inspector of Vaccination, and the vaccination at the outdoor dispensary, Badulla, was regularly inspected by the Colonial Surgeon.

The following table shows the number of persons vaccinated and re-vaccinated, with results, during 1901 and 1902 :—

Primary vaccination :—				1901.	1902.
Number vaccinated.	...	...	...	7,011	6,187
Number successful	...	...	...	6,218	5,627
Number unsuccessful	...	...	...	325	209
Number unknown	...	...	...	468	351
Percentage of successful to total inspected	...	...	...	95.04	96.41
Re-vaccination :—					
Number vaccinated	...	...	...	1,014	148
Number successful	...	...	...	471	111
Number unsuccessful	...	...	...	291	32
Number unknown	...	...	...	252	5
Percentage of successful to total inspected	...	...	...	61.81	77.62

Prosecutions under the Vaccination Ordinance.—There were 99 prosecutions, against 128 in the previous year. The results of the prosecutions were as follows :—52 convictions with fines amounting to Rs. 50.25 being inflicted, 13 acquittals, 9 cases were withdrawn, 8 cases were struck off as the accused could not be found, and 17 cases were pending at the end of the year.

(8) REPORT of the First Physician and Acting Surgeon in charge of the General Hospital, Colombo, Dr. H. M. Fernando, M.D., B.Sc., Lond., Fellow of University College, London.

(A) GENERAL HOSPITAL.

(1) Administration.

DURING the year 1902 the number of patients treated in the hospital amounted to 16,035. For purposes of comparison I append the following table :—

1897	...	9,063	1900	...	14,231
1898	...	9,102	1901	...	15,614
1899	...	9,399	1902	...	16,035

There is a steady and constant increase in the numbers receiving medical treatment. The daily average amounts to 515.09. The accommodation in the hospital provides for 467 patients only ; hence overcrowding is constant and continuous.

The temporary wards commenced in 1901 were not available for occupation till June of this year. They provide eighty-four beds for ulcer and allied cases. These wards are found to suit admirably the class of cases for which they were intended, and their opening greatly relieved the overcrowding, which was intolerable before.

The arrangement with the Home for Incurables, by which thirty-one beds are kept open for the General Hospital patients, the Government contributing to the Home funds the cost of their maintenance, continues still. But even now several beds of this hospital are permanently occupied by blind and infirm old patients, as such cases are not received by the Home. The new administration block for this hospital, a most pressing requirement for the proper conduct of its business, was again delayed this year. The plans, although completed, had to be altered in some important respects. The alterations desired necessitated a complete change of the original design, and hence the delay. The amended plans and estimates are now ready, and a start in the building will soon be made. As finally approved, this block will give a worthy and imposing frontage to this the largest and most important hospital in the Island, and, besides the necessary offices and accommodation for the out-patient department, it will provide adequate rooms in the first floor for the house officers.

The Professional Staff.—The changes consequent on the translation of Dr. T. F. Garvin as Chief Medical Officer, Prisoners of War Camp, Diyatalawa, continued throughout the year. Dr. Joseph de Silva, M.B., C.M., who was acting as the Third Physician, resigned the appointment on his taking up the duties of Assistant Sanitary Officer of the Colombo Municipality in September. Dr. J. H. Vanderwert, L.R.C.P., L.R.C.S., was appointed to act in his place.

Nursing.—The work of the Rev. Mother Superior and her staff increases with the increase of the patients. I take this opportunity to express my appreciation of the devoted and unselfish work which the Rev. Sisters so nobly perform to the great satisfaction of the suffering poor.

Expenditure.—For the diets and extras the sum expended during the year amounted to Rs. 56,413.49, for wages Rs. 10,170, for equipment Rs. 7,000, contingencies Rs. 4,320.41, and burials Rs. 530.55. The total cost per head per day for food and stimulants was 31.60 cents, as against 30.57 cents in 1901 and 30.63 cents in 1900.

Professional.—The total number of cases treated during the year reached the large total of 16,035. Of these, 1,101 died, the mortality being 6.86 per cent., as against 7.80 per cent. in 1901.

Amongst Malabars the death-rate amounted to 11·44, and amongst the cases sent in by the police in a more or less moribund condition the death-rate reached 33·87 per cent.

No special epidemic seems to have been prevalent in the district during the year under review, but dysentery, phthisis, diarrhoea, pneumonia, and enteric fever, were widely prevalent. Of enteric fever 133 cases were treated, as against 198 cases in 1901. In this connection I have nothing to add to what I have said before. That no great improvement in the public health can be expected until the improvement of conservancy and of drainage, a more liberal policy in the distribution of water to the poorer classes, and a check to overcrowding in the slums are undertaken by the Municipality.

During the year, with the relief obtained by the opening of two new wards, I was enabled to isolate the male consumptive patients into one well-aired ward, and thus treat them more rationally and effectively. The phthisis ward is under the care of Dr. M. Sinnatamby, where he has endeavoured as circumstances permit to keep the patients in the open air as much as possible. The isolation of these patients by themselves, whilst assisting considerably their nursing and treatment, will at any rate prevent the danger of infection to others, which was such a constant menace before.

(B) PAYING WARDS.

During the year 577 patients were treated in these wards, as against 639 in 1901. These cases were distributed as follows:—

				Medical.		Surgical.
Seamen's Ward	...	...	...	171	...	153
Clerical Ward	...	...	...	11	...	5
Planters' Ward	...	...	...	47	...	89
Anthonisz' Ward	...	...	...	28	...	39
Cargill's Ward	...	...	...	5	...	3
Passengers' Ward	...	...	...	17	...	9
Total				279		298

Of the numbers treated, the deaths were 41, equal to a mortality of 7·11 per cent. Twenty-five cases of enteric fever received treatment, with 7 deaths.

The diminution in the number of admissions in these wards from the figures of 1901 is due entirely to a large reduction in the number of seamen. Only 324 seamen received treatment, as against 426 in 1901. On the other hand, in the Planters', Anthonisz', and Passengers' Wards there is a good increase, as 253 patients were under treatment in the year as against 213 in 1901. The diminution in the number of seamen is easily explained. In 1901 and 1902 a large number of transports engaged in the China expedition passed through the port and crowded our Seamen's Ward with soldiers suffering from enteric fever and other acute diseases. The opening of the Trans-Siberian Railway has materially diminished the admissions of Russian soldiers into this ward during the last year.

During the year a higher rate of charges was sanctioned by Government for the maintenance of patients in these wards, as the income from these wards was unequal to the expenditure incurred, and precluded the possibility of further improvements in nursing and attendance. The new scale of charges came into force on the 1st July, 1902, after due notification in the *Government Gazette*.

Revenue and Expenditure.—The total income from these wards amounted to Rs. 34,405·63. The expenditure under the head of Diets, Lighting, Attendants, and Equipment amounted to Rs. 27,032·22, leaving a balance of Rs. 7,373·41. Deducting Rs. 2,000, the cost of the nursing staff, there remains a balance of Rs. 5,373·41 only, which is far from adequate to meet the expenditure incurred by Government for the medical staff, medicines, and surgical appliances, and the cost of upkeep and repairs to buildings.

Report of Mr. H. G. Thomasz, F.R.C.S. (Edin.), Second Surgeon.

I WAS in sole charge of the surgical work in the hospital during the year 1902. The surgical work of the hospital is daily increasing. A special chloroformist is required.

Accommodation.—The ulcer, syphilis, and female surgical wards have been overcrowded during the year on good many occasions. A special ward of twelve beds for gynecological cases is much required. I have again to note that it is necessary that the hospital should be provided with isolated rooms for infectious and contagious cases, like erysipelas, tetanus, &c. A "contributing ward" of eight beds is also urgently required for those who are not absolutely paupers, but are yet unable to enter the paying wards with their prohibitive fees. A large number of people from the lower middle class prefer to enter a ward not branded as "pauper." They like to contribute something for their maintenance in hospital to secure a little extra comfort, as obtains at present in the Clerical Ward.

Equipment.—Great care is taken to secure adequate supplies of linen, furniture, &c.

Nursing.—The members of the nursing staff are very conscientious, and work hard.

Attendants are poorly paid in the pauper wards. Their work is very indifferent.

Medicines, Materials, and Surgical Dressings have been supplied in sufficient quantities, but the last requisition for surgical instruments has been cancelled. An apparatus for administering gas and a new operating table are required.

Remarks on Professional Work.—A glance at the annexed tables will show the important nature of the operation work performed in this establishment, which includes every variety of surgical work. The total number of operations performed for the year was 735. There were twelve deaths, giving a mortality of 1·63 per cent.

Of the 17 amputations, 3 were of the thigh, 2 leg, 4 arm, 1 forearm, and 7 metacarpo-phalangeal.

Sixty-one operations were performed for inguinal hernia, 18 in cases of strangulation (herniotomy), and 43 for radical cure of reducible and irreducible scrotal hernia. Bassini's and Bank's methods of operation are still adhered to by me. Only one death occurred, and that was after herniotomy; the patient was brought in too late.

Four cases of hepatic abscess with two deaths, and one case of sub-diaphragmatic abscess.

Two cases of ovariectomy were performed; one died of shock.

Forty-eight cases of hydrocele were operated on ; all did well. Extroversion of sac or tapping and injecting with perchloride of mercury solution were the methods adopted.

Twenty-one cases of hæmorrhoids internal were treated by ligature and excision, with good results.

Four cases of stone in the bladder were dealt with, one by litholapaxy and three by supra-pubic cystotomy. The bladder walls were stitched by two layers of suture and a Jacques' catheter retained for six days. All recovered.

External urethrotomy (Cock's) was performed in 18 cases for impermeable strictures and where the parts were riddled with sinuses, and Wheelhouse's operation once. Two cases of internal urethrotomy and a ruptured urethra was sutured.

Ten malignant new growths were excised and 30 non-malignant.

Two cases of laparotomy were performed : one for intestinal obstruction due to a band, which was successful ; and the other for suppurative peritonitis, which proved fatal.

Two cases of tracheotomy were performed : one in a bad case of cut throat, which recovered.

Two cases of ligature of axillary artery, and one case of ligature of common femoral artery for aneurysm. Secondary hæmorrhage set in from the site of ligature.

Trephining was done on eighteen occasions, and on three occasions for mastoid abscess.

Eight cases of thoracoplasty, with one death.

Orcheotomy was performed on 25 occasions : 19 for advanced hæmatocele and six cases for suppurative phlebitis of the cord.

Ten cases of fistula-in-ano were performed, with good results.

Five cases of lymph scrotum were treated successfully by excision.

One case of nephrotomy and median cystotomy for profuse and prolonged hæmorrhage from bladder, found subsequently to come from ureter, and one case of median cystotomy.

Eight cases of post-pharyngeal adenoids were operated on.

The kneejoint was aspirated twice, and incised and drained on three occasions.

Excision of carbuncles were performed in six cases.

Three cases of perineorrhaphy, one amputation of cervix uteri for carcinoma, seven cases of curetting of uterus, one vesico-vaginal fistula, and three cases colporrhaphy were treated. All with good results.

Sixteen amputations of penis were performed for malignant disease.

There were 23 cases of catheterization under chloroform.

One case of varicose veins was operated on with success.

Five cases of excision of breast were performed.

One case of genu vulgum was operated on with success.

Extraction of bullets and foreign bodies numbered four.

One case of harelip, with good results.

356 other operations were done under chloroform, such as excision of glands of groin, circumcision, opening abscesses and sinuses, excision of bone, cauterization for prolapsus recti, excision of elephantiasis labii, &c.

Paying Wards.—Seventy-four cases out of the 735 were from the paying wards. The more important were such as radical cure for hernia, hepatic abscess, internal hæmorrhoids, carbuncle, perineorrhaphy, colporrhaphy, nephrotomy, sequestrotomy, laparotomy, and excision of varicose veins.

List of Operations.							
Total, 735 ; Paying Patients, 74 ; Deaths, 12.							
Nature of Operation.		No. of Operations.		Paying Patients.		Deaths.	
Amputations	17	...	—	...	—
Hernia (inguinal)	43	...	2	...	—
Herniotomy	18	...	—	...	1
Hepatic abscess	4	...	2	...	2
Hæmorrhoids	21	...	3	...	—
Hydrocele	48	...	5	...	—
Lymph scrotum	5	...	—	...	—
Harelip	1	...	—	...	—
Excision of malignant new growths	10	...	1	...	—
Excision of non-malignant new growths	30	...	—	...	—
Stone in bladder	4	...	—	...	—
Castration	25	...	1	...	—
Amputation of penis	16	...	—	...	—
Enucleation of eye	4	...	—	...	—
Varicose veins	1	...	1	...	—
Circumcision	79	...	3	...	—
Trephining	18	...	1	...	—
Ligature of arteries	2	...	—	...	—
Ligature of femoral arteries for aneurysm	1	...	—	...	1
Tracheotomy	2	...	—	...	—
Laparotomy...	2	...	—	...	1
Suture of extensive wound with wound of muscles	1	...	—	...	—
Sub-diaphragmatic abscess	1	...	—	...	—
Extraction of bullets, &c.	4	...	—	...	—
Excision of carbuncles	6	...	4	...	—
Fistula-in-ano	10	...	2	...	—
Post-pharyngeal adenoids	8	...	—	...	—
Catheterization	23	...	4	...	—
Cauterization	7	...	3	...	—
Scraping of sinus	17	...	1	...	—
Sequestrotomy	24	...	1	...	—
Aspiration of knee	2	...	—	...	—
Incision and drainage for suppuration of knee-joint	3	...	1	...	1
Penetrating wound of abdomen	1	...	—	...	—
External urethrotomy	19	...	—	...	2

Nature of Operation.	No. of Operations.	aying Patients.	Deaths.
Litholapaxy ...	1	—	—
Evulsion of nail ...	1	—	—
Scraping of callous ulcer ...	7	2	—
Reduction of paraphymosis ...	1	—	—
Internal urethrotomy ...	2	2	—
Pyocele ...	3	—	—
Exeision of breast ...	5	—	—
Antral abseess ...	1	—	—
Paracentesis abdominis ...	1	—	—
Setting of impacted fracture... ..	2	—	—
Exeision of labia (elephantiasis) ...	1	—	—
Thoracoplasty ...	8	2	1
Trephining for mastoid abscess ...	3	—	—
Supra-pubie lithotomy ...	3	—	—
Skin grafting (Thierch's) ...	1	—	—
Suturing ruptured urethra ...	1	—	—
Nephrotomy and median cystotomy ...	1	—	—
Transplantation of testicle ...	1	—	—
Excision of lymphatic varix... ..	1	—	—
Osteotomy for genu vulgum... ..	1	—	—
Abscess ...	85	8	2
Excision of diseased glands ...	109	20	—

Gynecological Cases.

Curetting ...	7	3	—
Amputation of cervix for carcinoma ...	1	—	—
Vesico-vaginal fistula ...	1	—	—
Perineorrhaphy ...	3	1	—
Uterine polypus ...	2	—	—
Ovariectomy ...	2	—	1
Colporrhaphy ...	3	1	—
Total ...	735	74	12

Report of Dr. M. Sinnatamby, M.D. Brux., F.R.C S., Second Physician.

I HAD during the year five wards under my charge for the treatment of medical cases. The total number of cases admitted into them was 3,364, as against 3,330 in 1901. No. 1 B (phthisis ward) was opened on 1st July. Overcrowding continued unrelieved during the first half of the year, and the largest number of admissions into my wards was during the month of January, when the accommodation was taxed to the utmost limit. During the second half of the year this chronic conjested state of the wards was relieved to a certain extent by the opening of the temporary and phthisis wards.

The opening of the phthisis ward of the General Hospital is, I hope, the first step towards the realization of a long-felt want. During the year 415 cases of phthisis were treated, with 104 deaths. The percentage of deaths to total treated was therefore 25.06. Only one case was discharged apparently cured, a few improved, and the rest not improved.

Enteric Fever ; Malarial Fever ; Anchylostomiasis.—Please see my previous reports.

Nursing.—Please see my previous reports.

Administraction.—Please see my previous reports.

Attendants.—Please see my previous reports.

Laundry.—Please see my previous reports.

Chloroforming.—This work encroaches so much on my legitimate duties that in the interest of the patients under my care some steps should be taken to relieve me of this portion of the work. I would in this connection venture to suggest that the arrangements made in the Madras hospital, having worked well, may be introduced here, at least as a tentative measure. The surgeons have or will have qualified house officers, who, like the Madras arrangement, may easily do the chloroforming to their respective surgeons, and the help the latter require during operation can easily be rendered by the senior students.

Before concluding, I must again appeal for a qualified house officer.

Report of Mr. J. A. H. Vanderwert, L.R.C.P., L.R.C.S., Acting Third Physician.

I HAVE the honour to submit my report as Acting Third Physician of the General Hospital for the year 1902. I regret that I am unable to produce a complete one, as I only assumed duties late in the year (October). The wards under my charge are the fever ward, two lower male diarrhoea wards, and the female diarrhoea ward. The number of admissions into the fever and male diarrhoea wards during the year 1902 was 2,024, and into the female diarrhoea ward 817. Of the former 314 died, and of the latter 179 deaths occurred, the rest being discharged cured or relieved.

I regret this high mortality ; I believe it is not higher than previous years. I attribute it to the nature of the cases admitted into these wards. The class of patients admitted into these wards is generally of a very low order, and necessarily in a very advanced state of illness. I have noticed several deaths a few hours after admission into these wards.

The fever ward was formed in July, 1902. The cases admitted into this ward are generally enteric and pneumonia and a few sundry cases of dochmius duodenalis and rheumatism. Since July, 1902, 434 patients were admitted, and there were only 12 deaths. During the months of

October, November, and December there were four cases of enteric fever successfully treated in this ward. The five cases of pneumonia admitted into this ward were also successfully treated. The cases admitted into the lower wards were mostly those of acute diarrhoea and dysentery. Cases of tabes dorsalis, spastic paraplegia, hemiplegia, and intestinal obstruction were also noticed by me. The cases which proved most fatal were acute diarrhoea, dysentery, and advanced phthisis.

Accommodation is insufficient. Several incurables were placed in the lower wards for over eighteen months, and I am glad to state that they were transferred to the Victoria Home last December.

Sanitation.—Satisfactory.

Nursing.—The Sisters are most willing. I am of opinion that the staff ought to be slightly increased.

Report of Mr. W. H. de Silva, M.B., C.M., Ophthalmic Surgeon.

Staff.—The staff of the infirmary remains the same.

Number of Out-patients treated:—

	1901.	1902.
Eye Cases ...	3,797	4,326
Ear Cases ...	383	394
Throat Cases ...	156	207
	<u>4,336</u>	<u>4,927</u>

Diseases treated during the year include:—

Albinism ...	1	Fistula lachrymalis ...	2
Abscess, lid ...	10	Glaucoma ...	3
Do. corneal ...	1	Do. sub-acute ...	1
Do. lachrymal ...	13	Do. acute... ...	7
Alopæcia ...	1	Do. chronic ...	3
Amblyopia, tobacco ...	3	Growth in eye ...	1
Aniridia, partial ...	1	Do. polypoid ...	3
Anisometropia ...	5	Granulomata ...	1
Astigmatism ...	9	Glioma ...	1
Do. myopic ...	10	Gunshot injury, eye ...	3
Do. hypermetropic ...	2	Hernia iris ...	4
Do. compound ...	6	Hernialopia ...	1
Asthenopia ...	3	Hordeolum ...	3
Atrophy, optic nerve ...	20	Hæmorrhage, sub-conjunctival ...	10
Do. sclerotic ...	1	Hyperæmia ...	2
Burn ...	3	Hypertrophy of lachrymal gland... ..	2
Blepharitis ...	8	Hypermetropia ...	83
Do. ulcerosa ...	25	Inflammation of frontal sinus ...	1
Do. squamosa ...	9	Injury to lid ...	1
Benophthalmos ...	1	Do. eye ...	22
Conical cornea ...	3	Do. orbit ...	1
Cyst of caruncle ...	1	Impetigo ...	1
Do. dermoid ...	2	Irido choroiditis ...	1
Do. lid ...	3	Iritis ...	39
Do. Meibomian ...	22	Do. traumatic ...	3
Do. sebaceous ...	1	Do. rheumatic ...	8
Contusion ...	5	Do. rheumatic chronic ...	5
Cataract ...	162	Do. syphilitic ...	3
Do. senile ...	5	Do. gonorrhœal ...	1
Do. congenital ...	3	Keratitis ...	19
Do. traumatic ...	6	Do. neuro-paralytic ...	1
Do. ante-polar ...	2	Do. diffuse punctate ...	1
Do. post-polar ...	2	Do. superficial ...	12
Do. cortical ...	1	Do. interstitial ...	11
Do. diabetic ...	1	Do. profunda ...	3
Do. with choroidal degeneration ...	1	Do. leprotic ...	1
Choroiditis ...	2	Do. ulcerosa ...	77
Choroido retinitis ...	3	Do. ulcerosa serpiginous ...	1
Conjunctivitis ...	297	Do. phlyctenular ...	8
Do. phlyctenular ...	49	Do. striatata ...	1
Do. chronic ...	4	Do. parasitic ...	3
Do. chronic catarrhal ...	7	Do. vaccinal ...	1
Do. acute catarrhal ...	5	Kerato malacia ...	4
Do. purulent ...	2	Kerectasis glob. ...	1
Do. granular ...	2	Leucoma ...	38
Do. follicular ...	12	Do. adherent ...	5
Dacryocystitis ...	2	Lipoma ...	1
Degeneration, cystoid, of cicatrix (cataract) ...	1	Malformation, congenital (entire absence of eyeball) ...	1
Deposit, calcareous ...	1	Microphthalmos ...	1
Detachment of retina ...	2	Microcornea ...	1
Disease, fungoid, of cornea ...	3	Macula cornea ...	22
Dislocation of lens (traumatic) ...	1	Myopia ...	38
Do. into anterior chamber ...	2	Do. progressive ...	2
Dislocation of lens under conjunctiva ...	1	Musca volitantes ...	5
Entropion ...	3	Neuritis, optic ...	5
Exotropion ...	2	Neuralgia ...	10
Epiphora ...	2	Nyctalopia ...	1
Episcleritis ...	1	Oedema of lid ...	8
Foreign body in eye ...	36	Opacities in vitreous humour ...	5
Do. cornea ...	35	Occlusio pupilli ...	5
		Obstruction, lachrymal ...	26

Opacities, dotted in capsule of lens	1	Scleritis	...	4
Ophthalmia, sympathetic	9	Sclerokeratitis	...	2
Do. neonatorum	8	Strabismus	...	2
Do. gonorrhoeal	2	Sarcoma	...	2
Do. catarrhal	8	Squechia, ante and post	...	9
Do. do. chronic	10	Staphyloma	...	26
Do. do. acute	34	Do. sclerat	...	1
Paralysis, external rectus	2	Trachoma	...	24
Periostitis, orbital	1	Tarsitis	...	2
Presbyopia	85	Tags, dermatic	...	1
Panophthalmitis	7	Trichiasis	...	1
Pinguecula	12	Tumour on disc	...	1
Ptosis	3	Do. of orbit	...	2
Pterygium	20	Zanthea conjunctiva	...	1
Psilosis (vitreous opacities)	3	Zanthelesma	...	1
Papilloma (epitheeale)	1	Zerosis conjunctiva	...	17
Poisoned bite (eye)	1	Ear diseases	...	145
Phthisis bulba	7	Throat diseases	...	67
Ringworm	2			

Collections.—Rs. 124·72. These were purely voluntary.

Number of Indoor Patients.—478. There had been performed 118 major operations and 144 minor operations during the year, making a total of 262. Forty-eight cataract operations had been done, most of which were successful.

The following is a list of the more important operations performed :—

Abscess, lachrymal	...	1	Iridectomy, preliminary, for cataract	2
Do. corneal	...	1	Do. for prolapse of iris	2
Do. lid	...	1	Do. for occlusion of pupil	4
Cataract	...	48	Needling	6
Do. dislocation of lens into			Orbital periostitis	2
anterior chamber	...	1	Obstruction, lachrymal	3
Corneal ulcer	...	14	Ophthalmia, purulent (scarification	
Cyst, dermoid	...	1	of conjunctiva and cauterization	
Glio sarcoma of eye	...	1	of cornea)	1
Hypertrophy of lachrymal gland	...	1	Pterygium	6
Growth, cystic of conjunctiva	...	1	Staphyloma (abscision)	1
Cystoid degeneration of cicatrix	...	1	Strabismus	1
Enucleation	...	5	Sarcoma of eye	2
Iridectomy for glaucoma	...	2	Do. of eye and orbit	1
Do. for leucoma	...	6	Trachoma	3

Improvements.—Owing to the possibility of the Victoria Memorial being an accomplished fact, I will not make suggestions for improvements. May I again draw the attention of the authorities to the need of a female attendant for the Eye Ward ?

(9) REPORT of the Acting Medical Superintendent, Lunatic Asylum, Colombo,
Mr. O. Johnson, L.R.C.S.

I HAVE the honour to submit my report of the administration of the Lunatic Asylum for the year 1902.

This report, as compared with its predecessors, will naturally be devoid of much interest, as, at its best, it can only be a dry statistical record, amplifying the returns which have already been forwarded, and cannot possess the value which attaches to the opinion of an expert on the subject of Lunacy.

I assumed charge of the institution on 16th March last, relieving Dr. Spence, who had obtained a year's leave, and have thus been responsible for its administration for a period of over nine months.

Population.

Following the lines of previous reports, I will deal first with the subject of population, and in doing so will separate the Asylum proper from the House of Observation.

The number remaining at the beginning of the year in the Asylum was 463 (302 males and 161 females), the admissions during the year amounted to the large total of 165 (108 males and 57 females), thus making a total of 628 treated (410 males and 218 females). 93 patients were discharged (62 males and 31 females) and 52 died (32 males and 20 females). On the last day of the year the strength of the Asylum was 483 (316 males and 167 females), or 20 more than at the beginning of the year, the increase being pretty proportionately distributed between males and females. The daily average was 479·28, i.e., 314·99 males and 164·29 females, a slight decrease on the total for the previous year, which was 481·45, but an appreciable increase in the male population, which was 305·39 in 1901.

In the House of Observation 5 males and 3 females (total 8) remained at the beginning of the year, 225 were admitted (149 males and 76 females), making a grand total of 233 treated (154 males and 79 females), 69 were transferred to the Asylum (41 males and 28 females), 150 were discharged (104 males and 46 females), 2 females died, and there remained at the end of the year a total of 12 (9 males and 3 females). The daily average for the House of Observation was 8·95 (4·67 males and 3·28 females), which was in excess of the figures for 1901 by about 1 for males and 2 for females, or 3·52 on the total.

Taking the Asylum and House of Observation together—and it is necessary to do so to correctly estimate increase or decrease as compared with previous years, as there are no two distinct buildings, and the distinction is only a technical one to serve the requirements of the law—the daily average for the year was 487·23 (319·66 males and 167·57 females). This compared with 1901 shows that, though not only was there an increase on the male side of about 10, but also an actual increase on the total of

nearly 1. This steady increase in the population, especially on the male side, where the accommodation is most limited, is a matter requiring very serious consideration, and the provision of extra accommodation cannot be much longer delayed without injury to the health of the place. It is true there has been no real overcrowding up to date, *i.e.*, the dormitories have not been occupied to the extent of precluding sufficient air space, or of being injurious to health, but the accommodation of a fairly large number of patients (no less than 94 on one occasion), however quiet and carefully selected, in the verandahs is a condition of things which cannot be contemplated with equanimity. I confess to a feeling of very great uneasiness on this account, and my anxiety has been much enhanced by an unfortunate occurrence very shortly after my assumption of duties, and to which reference will be made later on.

This question of overcrowding in the near future has engaged Dr. Spence's attention for a long time, and I find allusion made to it in several successive reports. His suggestion to convert the gate-house into wards for quiet patients, and to accommodate the displaced steward and overseers and their families in a separate new building in the grounds of the Industrial Department, at the back of the Asylum, had, when I last heard of it, reached the stage of an estimate for the necessary alterations and for the new building being submitted to Government for provision to be made in the Supply Bill of the present year; but as the works are not included in the Supply Bill, I presume no provision has been made.

As the question is one of urgency, I beg to propose, as an alternative to Dr. Spence's suggestion, and one which would cost infinitely less, the conversion of the suite of rooms occupied by my assistant into wards for European and quiet patients, a small staircase being provided at the western end of the male transept; and the occupation by the Resident Officer of the rooms lately vacated by Dr. Spence, who on his return will enter into occupation of the Superintendent's new house. I will not enter into the details of my suggestion, as I do not know whether it would appeal to Government or to Dr. Spence, but I claim for it economy, the possibility of immediate execution, as the cost would be small enough to be met from the annual vote for the maintenance of hospitals allowed to the Director of Public Works, and relief to overcrowding to the same extent as, or possibly larger than, by occupation of the gate-house. Not only was the daily average greater than in the previous year, but also the maximum strength on any one day. In 1901 the largest number accommodated was 502, and only on three days of the year, *viz.*, 31st January and 7th and 9th April, whereas in 1902 the record of 505 was reached on four days of the same month, *viz.*, 11th, 12th, 13th, and 16th October, and the increase was, as in the daily average, on the male side, *viz.*, 330, as against 318 in the previous year. Between the months of July and October the strength often stood at from 500 to 504, and only once did it come down to 491. The minimum strength on any one day was rather lower than in 1901, *viz.*, 462 on 6th March, as against 468, but the diminution was only on the female side, where, as I have stated before, the limited accommodation is not so much felt; and there actually was an increase of six on the male side.

I have been at some pains to prove the steady increase of population, and I trust the figures I have adduced will convincingly bring home to the Government the necessity for providing extra accommodation at an early date.

I subjoin a table showing the steady increase in the daily average from 1899, which should be taken along with the increase in the highest number accommodated on any one day and of the male population:—

1899	...	473.11	|	1901	...	486.88
1900	...	485.45	|	1902	...	487.23

Admissions.

The year recorded the highest number of admissions into the Asylum and into the House of Observation, 165 and 225, as against 124 and 160 respectively in 1901. Of the admissions into the Asylum, 18 were re-admissions (11 males and 7 females), and two of them (1 male and 1 female) were admitted twice in the year. Five Boer prisoners of war were received under the orders of His Excellency the Governor, 4 from the Diyatalawa Camp and 1 from Mount Lavinia.

The classification of the cases admitted was as follows:—Mania 92 (59 males and 33 females), melancholia 48 (31 males and 17 females), dementia 4 (3 males and 1 female), idiocy and imbecility 1 (female), epileptic insanity 9 (5 males and 4 females), and apparently not insane 11 (10 males and 1 female). No case presenting the characteristics of general paralysis came under my observation, although on first admission I suspected the disease in two, but after prolonged observation the absence of motor symptoms convinced me that I was mistaken.

Those cases I have returned as "apparently not insane" were chiefly criminal patients charged with minor offences, *e.g.*, "disorderly and riotous behaviour" or "trespass for an unlawful purpose," and did not either on admission or subsequently show the slightest symptoms of mental aberration. They were in due course produced before the visitors and sent back to stand their trial. I do not suggest that when the offence with which they were charged was committed they were in full possession of their faculties (and it is quite possible that at the time they were really insane and recovery had followed rapidly), but in a few cases I think, and especially in one where the charge was rather of a more serious nature, the accused had feigned successfully.

Fifty-two of the admissions were "criminals," 35, however, for technical offences, such as disorderly behaviour or trespass. The remaining cases were as follows:—Murder and manslaughter 2, aggravated assaults 3, burglary 1, cattle stealing 2, theft 8, and arson 1.

A large percentage of the cases admitted arrived at the Asylum in a very poor physical condition, and many in an extreme state of exhaustion or disease. A few of them had immediately on arrival to be taken on the sick list, and died within a few weeks. Both the deaths in the House of Observation were cases of this type.

Delusions were rather rare, and, when present, of a very monotonous type, either of being charmed or of poison administered through some secret agency. A few cases were admitted with extravagant delusions of untold wealth, superhuman strength and powers, and being of royal or noble descent. But, except in the case of a Eurasian fitter, in whose delusions electricity played an important part, the complex delusion of highly organized brains were conspicuous by their absence.

In a small proportion of cases distinct suicidal tendencies were observed, and precautions were taken accordingly. Two of them are still under careful observation, and a determined attempt at self-destruction by one was frustrated by the vigilance of the attendants.

The nationalities of the admissions were as follows:—Europeans 7, Burghers 7, Sinhalese 111, Tamils and Malabars 28, Moors 12. The Europeans include the five prisoners of war.

Discharges.

The number discharged during the year was 93 (62 males and 31 females), which was higher than that of the previous year by 10, and less than that of 1896 only. In relation to the admissions, the percentage of discharges was 56.36 (57.40 males and 54.38 females). Calculated on the total number treated, the percentage was 14.80 (males 15.12 and females 14.22), which I consider very satisfactory. The discharges are separated under the three heads "Recovered" 65 (39 males and 26 females), "Relieved" 19 (15 males and 4 females), and "Not improved" 9 (8 males and 1 female). The cases returned as "relieved" are those who, though mentally much improved, could not be recommended for unconditional discharge, and have been handed over to relatives on security being given for their proper care and custody. Without exception, those cases shown as "not improved" were the "not insane" criminal patients, who were sent back to stand their trial. Of course, the inclusion of these cases in the return as "not improved" is misleading, but as they could not have been returned under either of the other two heads it was unavoidable.

In respect of the discharge of patients of very long residence, the year, I think, has been a singular one. The difficulty in these cases is to trace relatives and friends; and to cast such patients adrift on the world, friendless and uncared for, would be cruel. I was fortunate, however, in tracing the relatives of a man who had been here for nearly twenty-three years, and handing him over safely to their care. This man is returned as "recovered," and that really had been, so far as I could test, his mental condition for some time. In two other cases of twenty-one and eighteen years, respectively, the relatives themselves came to hear of the patient's existence in quite a fortuitous manner, and removed them after giving sufficient security for their proper care. Another case of fifteen years' standing, a woman who had been adjudged insane at Kalutara, was sent to her home at Mattakkuliya, the relatives having been traced to that locality after due inquiries from the woman. One case was discharged after ten years' residence, another after eight, three after six years, one after five years, and the others after shorter periods. The shortest period of residence was twenty-four days, and a fairly large proportion was discharged within the year of admission.

Health of the Population.

The total admissions into the male and female infirmaries were 243, bowel complaints claiming the largest number, 77 for dysentery, and 53 diarrhœa. Tubercular diseases came next, with a total of 19, simple conjunctivitis contributed 9, simple continued fever 8, pneumonia 5, softening and degeneration of brain and other forms of given brain lesions 16, epilepsy 5, chickenpox 4, and smallpox 1. In the above list I have enumerated only the principal diseases. Dysentery and diarrhœa were prevalent throughout the year, and did not appear to be affected by the seasons. In March, April, June, August, October, and December, however, the largest number of dysentery cases were admitted, but not to any alarming extent or to cause anxiety, the highest number in any one month being nine.

Four cases of sporadic chickenpox occurred, and were transferred to the Infectious Diseases Hospital and returned quite recovered: two cases in February, 1 in March, and 1 in December. In all the cases it was impossible to trace the infection, and the patients were old residents, who had not been beyond the Asylum walls for a long time. Fortunately the disease did not spread. A case of modified smallpox occurred in July. The patient was an unvaccinated woman and a recent arrival from Badulla. The fever and eruption appeared within a week of her arrival, and it was thought that she had taken the infection at Badulla; but on reference to the medical officer of that station it was elicited that she had been long enough under observation at that station to preclude the possibility of having taken the infection in her village, and that Badulla had been free from the disease for years. Of course, it is possible she had taken the disease on the long journey from Badulla to Colombo, but I could get no information on this point. She was transferred to the Infectious Diseases Hospital, and returned after making a good recovery. Although this woman slept in a dormitory with a large number of patients, and was kept under observation in the Asylum for over twenty-four hours after the appearance of the eruption owing to some difficulty in diagnosis, the disease fortunately did not spread; and this was similar to the experience of the two previous years.

Deaths.

Fifty-two patients died in the Asylum (32 males and 20 females), and two females in the House of Observation, as against 74 in the previous year (38 males and 36 females). In relation to the daily average and total treated, the death-rate for the Asylum only was 10.84 and 8.28 per cent. respectively. The death-rate, though appreciably less than that of the previous year, was still high, but the large proportion of cases were incurables and old patients, whose frail existence had for a long time been bolstered up with good food and extras. Softening and degeneration of the brain and other form of brain lesions were responsible for 11 deaths, and were a contributory factor in a large number of cases returned under other causes. Phthisis and other forms of tubercular diseases accounted for 14, dysentery for 9, diarrhœa for 7, old age for 3, and was an important element in several others, debility 1, pernicious anæmia 1, chronic myelitis 1, epilepsy with gross brain lesion 3, general paralysis of insane 1, laryngitis 1, peritonitis 1, and suicide by hanging 1. One of the deaths was a Boer prisoner of war, who was transferred from Mount Lavinia suffering from acute melancholia. He contracted an attack of acute dysentery, and succumbed to it within a short time, treatment being rendered most difficult owing to his mental condition. The case of suicide occurred in April last, and was that of a Tamil woman who was admitted to the Asylum on 7th June of the previous year. Though subject to fits of excitement, and she had once climbed up a wall and leaped down, suicidal tendencies were not suspected, and for more than two months previously she had been sleeping in Dormitory No. 2. The month previous to the occurrence, a suicidal European lady having been admitted, the itinerating night watcher was detached to attend exclusively on her, and the watcher of Dormitory No. 2 was told off to perform dual duties. This

arrangement was made by Dr. Spence, and I saw no reason to disturb it, as, after my assumption of duties no dangerous or suspicious cases were admitted into the ward. On the night in question, about 10 P.M., the deceased spoke in a friendly way to the night watcher and asked for a chew of betel, just previous to the latter leaving the ward to visit the other wards. On the watcher's return about an hour later she found the woman suspended by her neck to a crossbar of one of the verandah windows. The body was at once cut down, and every effort was made to restore animation, but without success, though there was slight action of the heart when my assistant was summoned. After due investigation I held the night watcher not to blame, and her account of the occurrence was corroborated by the condition of the body when it was cut down. The usual inquest was held, and the finding of the Coroner's jury was that no one was to blame. This was the second case of suicide since the occupation of this Asylum, the first having occurred the year previously.

Expenditure.

Except in the case of diets and extras and contingencies, the expenditure has been kept within the votes. The excess expenditure was not due to any unforeseen cause, nor is it accounted for by the slight rise in the daily average. There was no increase in the contract rate for raw provisions, and my inability to keep within the vote was purely due to the fact that, notwithstanding the supplementary provision of Rs. 8,000 in the previous year, and the large increase asked for by Dr. Spence in submitting his estimate for 1902, the sum voted was exactly the same as that of 1901.

The contingent vote has for many years been exceeded, and no increased provision has been made since the introduction of gas, which at present absorbs the whole of the sum voted. Before gas was introduced in 1891 the contingent vote was Rs. 3,000, and this was the sum allowed in 1892 also, but in 1893 it was reduced to Rs. 2,000, and was gradually raised in 1897 to Rs. 2,500, at which figure it has since stood. The substitution of incandescent burners this year will, it is hoped, reduce the gas bill by at least one-half.

Diets, &c.

The raw provisions supplied by the contractor were on the whole of good quality, and it was but seldom that it was attempted to pass an inferior article. The milk supply was good, the cows being milched on the premises under the immediate supervision of one of the overseers. The scale of diets is, I think, a liberal one, and permits of variety, but for the restriction imposed by a limited vote.

Accidents and Injuries.

I am glad to be able to report no fatal accident during the year, and only one case of suicide, which I have already referred to at length. There were 3 cases of accidents, 4 of injuries inflicted by other patients, and in one case, in spite of the most careful inquiry, the manner in which the injuries were sustained was not ascertained. This was a serious case of fracture of rib, and there was no doubt in my mind that it was caused either by another patient or an attendant, but as the patient was very excited, troublesome, and incoherent, it was impossible to learn the truth. What enhanced the difficulty was that the patient occupied different wards by day and night. The most serious injury by another patient was fracture of the lower jaw. There were two fractures, the result of falls during epileptic fits, one of the right humerus and the other of the second phalanx of the right middle finger. Another patient sustained a compound fracture of the left ring finger accidentally whilst engaged in turning the wheel of the force pump. The other injuries were scalp wounds. On the whole, however, the attendants were careful and vigilant, and injuries were few and far between.

Amusements and Recreations.

The usual amusements were provided during the year: cards, bagatelle, and musical instruments. A few patients were sent to the Museum, Buddhist temples, and to witness the races at the August meet. In celebration of the King's Coronation the gate-house was decorated and illuminated, and a treat was provided, refreshments being served liberally and sports indulged in, the successful competitors receiving prizes. The annual Christmas treat was on rather a bigger scale than the Coronation one, and the Volunteer Band was in attendance. This treat is looked forward to with eagerness by many of the old patients, and appears to be very greatly appreciated. The acquisition of a powerful gramophone contributed greatly to the enjoyment of these poor unfortunates, and this machine purchased from the Industrial Fund continues to be a source of amusement and wonder. The library, which was started a few years ago, has not been availed of to any large extent. A few patients only could be induced to read or take any interest in literature. Tennis was revived during the year, and was indulged in regularly by a few. The limited extent of the grounds on the male side makes games like cricket or football impossible, but it is hoped, when the pitch at the back of the Asylum is completed, to provide outdoor games on a larger scale than at present obtains.

Building.

The buildings were kept in a good state of repair by the Public Works Department. No additions or alterations were made during the year. The new block of cells on the female side, which was completed in the course of the previous year, was occupied throughout the year, and was a valuable addition to the accommodation in that division. Relief on the male side is most required, and I have incidentally referred to the matter in my remarks on the subject of admissions into the Asylum during the year.

The Medical Superintendent's new house was occupied by me in March last, and the suite of rooms in the administration block were left unoccupied since Dr. Spence's departure.

Water Supply.

The water supply was far from satisfactory. It was my duty to bring the matter to your notice very soon after my assumption of duties; and in the belief that the deficiency of the supply was due entirely or in a very great measure to choking of the pipes, the pipes were thoroughly cleaned and relaid by the Public Works Department. But the expected improvement was not realized, and in the latter part of the year the supply was much less and more interrupted than before.

Staff.

The attendants, considering the class from which they are chosen, were on the whole satisfactory and attentive to their duties, and I think it reflects great credit on their care and vigilance that serious injuries were so few, despite the large number of troublesome and violent cases admitted.

General Remarks.

Suggestion of a Probable Cause of Lunacy in Ceylon.—In concluding this report, I desire to make a few observations of a general nature. In the majority of the admissions into the Asylum the cause of the affliction was quite obscure, and I do not in these remarks presume to offer anything like a decided opinion on the etiology of lunacy. In a very few cases only were histories available, and these were generally of so meagre and unreliable a nature as to be utterly worthless. But the comparatively large number of admissions from the Kalutara and Panadure Districts seemed to me to suggest a cause. These districts, as is well known, contain a very large number of distilleries, and are by repute the home of the arrack trade of the Island. Is lunacy in its incidence in these districts a mere coincidence, or may it not be that an intimate association exists between it and the practice of arrack drinking? In some of the cases no history of excessive drinking or drinking even in moderation was available, but my suggestion is that the disease is not due directly to the practice, but rather to a neurosis inherited from dissolute forbears.

Industrial Department.—This report would be incomplete without a reference to the Industrial Fund. The fund, the accumulated earnings of the patients, amounted at the end of the year to Rs. 18,080.03, or Rs. 815.72 in excess of the balance in hand on 31st December, 1901, which sum represented the nett earnings for the year (inclusive of interest on the sums invested in Government stock, and in fixed deposit and in current account in the Hongkong and Shanghai Bank), as against the 278.25 in the previous year. The chief source of income was the sale of vegetables to the provision contractor, which realized a sum of Rs. 1,448.50. The investments in Inscribed Stock gave Rs. 499.20, and the interest from the fixed and current accounts in the Hongkong and Shanghai Bank was Rs. 170.24, making a total gross income of Rs. 2,117.94.

The expenditure for the year was Rs. 1,302.22, and was more than covered by the profits from the garden alone. This expenditure included a monthly payment of Rs. 10 to the assistant steward for keeping the accounts of the Department, the supply of betel, tobacco, and cigars, which cost about Rs. 71 a month, the provision of two treats, one during the Coronation of the King and the other at Christmastide, and the purchase of a gramophone with twelve records at a cost of Rs. 130, besides small expenses, such as postage stamps, the purchase of a tennis net and balls, gravelling the tennis court, &c. It will thus be seen that the fund is in a sound condition, the income being in excess of the expenditure, and the capital gradually added to. It is of the greatest use to the Asylum, as being the means of providing comforts and luxuries for the patients which cannot be purchased from the annual votes to the institution, and of making their lot as happy as possible in their unfortunate circumstances.

In September last I tried to reduce the expenditure by cultivating betel, the supply of which now costs about Rs. 12 a month, but the experiment proved a failure after two months' supply. The creepers were attacked by a fungoid disease, which soon spread and caused total destruction. I append a statement showing the state of the fund at the end of the year :—

Statement of Accounts of the Industrial Department, Lunatic Asylum, 1902.

	Rs.	c.	Rs.	c.
Balance on December 31, 1901 :—				
Cost of 4 per cent. Inscribed Stock (Rs. 8,480)	...	8,629	85	
Do. do. (Rs. 4,000)	...	4,400	0	
Fixed deposit, Hongkong and Shanghai Bank	...	—	13,029	85
Current account, Hongkong and Shanghai Bank	...	2,332	85	1,881 0
Cash in hand	20	61	
			2,353	46
			17,264	31

Receipts in 1902 :—

Interest on current account, Hongkong and Shanghai Bank	51	20
Interest on fixed deposit account, Hongkong and Shanghai Bank	119	4
Dividends on Government Stock	499	20
Sales of produce, &c.	1,448	50
		2,117 94

Expenditure in 1902 :—

General current expenditure	1,302	22
Balance Profit	...	...
		815 72
	Total	...
		18,080 3

Invested, &c., as follows :—

In 4 per cent. Ceylon Government Stock	...	...	8,629	85
Do. do.	...	...	4,400	0
			13,029	85
Fixed deposit, Hongkong and Shanghai Bank	...	...	2,000	4
Current account, Hongkong and Shanghai Bank	...	3,039	36	
Cash in hand	...	10	78	
			3,050	14
	Total	...	18,080	3

(10) REPORT of the Medical Superintendent, Leper Asylum, Hendala, Mr. W. H. Meier.

I HAVE the honour to submit the annual report of the Leper Asylum, Hendala, for the year ending 31st December, 1902.

(1) *Statistics.*

The general statistics for the year are as follows :—

		Males.		Females.		Total.
Remained on 1st January, 1902	...	222	...	54	...	276
Admitted during the year	...	86	...	20	...	106
	Total treated	308		74		382
Discharged	...	28	...	2	...	30
Died	...	30	...	11	...	41
Remained on 31st December, 1902	...	250	...	61	...	311

The total number treated was 46 less than in the previous year. The largest number resident was 314, the lowest 261, and the daily average 225·25 males and 56·08 females. The average amount of cubic space was 1,138·65 cubic feet, the superficial area 73·70 square feet. The number of available beds was 332. The female wards were somewhat, but not inconveniently, overcrowded, as there was sufficient space in the wards to admit of a few more beds than the assigned number; the male wards were seldom fully occupied, and there was ample room for new admissions.

Admissions.—The number admitted was 106, 44 less than in the previous year; 59 were new cases and 47 re-admissions. Of the new cases, 21 were of the anæsthetic, 19 of the tubercular, and 17 of the mixed form of leprosy, the duration of the disease varying from six months to thirty years. Two doubtful cases were admitted, but under observation were found to be non-leprous, and subsequently discharged from the asylum with the sanction of the Principal Civil Medical Officer. The considerable, almost abrupt, diminution in the number of admissions, which were voluntary during previous years, was no doubt due to the Lepers' Ordinance coming into operation at the beginning of the year, and the consequent disinclination of lepers to surrender their liberty, to be separated from their families, and compulsorily detained for life in the asylum.

The new cases are distributed as follows, according to residence previous to admission into the asylum :—

Western Province.			Central Province.		
Residence.		No.	Residence.		No.
Colombo	...	22	Kandy	...	1
Colombo District	...	3			
Siyane Korale	...	3	Province of Sabaragamuwa.		
Salpiti Korale	...	3	Ratnapura	...	3
Kalutara	...	4			
Negombo	...	1	Province of Uva.		
Hewagam Korale	...	1	Badulla	...	2
			Haldummulla	...	1
Southern Province.			Southern India	...	6
Galle	...	2	Mauritius	...	1
Galle district	...	6			

Discharges.—Thirty lepers were discharged from the asylum, of whom 22 absconded, 2 were discharged on leave and subsequently re-admitted, 4 Malabar lepers were at their request sent back to their homes in Southern India, 1 non-leprous patient was discharged by authority, and 1 was removed with the consent of Government for segregation in his own house, all due restrictions according to the Ordinance being observed. The absconders were reported to the Government Agents, chiefly of the Western and Southern Provinces, who had several of them arrested and sent back to the asylum in charge of the police.

Deaths.—There were 41 deaths during the year, 2 less than in the previous year, the percentage to the total number treated being 10·73, as against 10·04 in the previous year, and were due chiefly to debility and exhaustion from long-continued disease, supervention of gangrene from neglected ulcers on admission, and in three cases from tubercular phthisis acquired prior to admission.

(2) *Lepers' Ordinance of 1901.*

The Lepers' Ordinance of 1901 for the compulsory detention of lepers in the asylum on the assumption that the disease is contagious came into operation on 1st January, 1902, but, as only a short period has elapsed since its introduction, it is too soon to form an opinion as to its working and its effect on the leper population of the Colony. Only a few cases were compulsorily admitted, being sent in from the Provinces by the Government Agents, but the majority have sought admission voluntarily, and were admitted, after examination, with a ticket of admission from the Principal Civil Medical Officer. The Ordinance has not as yet been strictly enforced, as there are still many lepers in their homes who have not been reported and sent into the asylum. The asylum is not in a position at present to receive a large number of admissions, accommodation being insufficient for the purpose. The proposed additions—three new wards with fifty beds each—are still under consideration of Government, the estimates for which have not yet been sanctioned. Separate and suitable buildings are also required for accommodating the better classes of patients who come under the Ordinance, for whom paying wards should be established.

(3) *Administration.*

There were no additions to the staff of the asylum. Mr. Ederesinghe, the apothecary, was transferred to another station, his post being filled up by the appointment of Mr. Nanayakkara, who took up his duties on 11th June. An increase of coolies and a gatekeeper, to act also as a watcher, is urgently needed to prevent intercommunication between the inmates and the neighbouring villagers.

(4) *Water Supply, Dietary, and Sanitation.*

The water supply has, as hitherto, been ample and good; the dietary, both as regards quantity and quality, satisfactory; and the sanitary condition of the asylum has, as usual, been fully maintained during the year.

(5) *Outdoor Dispensary.*

2,109 out-patients were treated during the year, as against 1,487 in the previous year, the increase being due chiefly to the prevalence of malarial fever in the outlying districts and the general prevalence of worm affections among the children in the neighbouring villages, 454 cases of the former and 509 of the latter having been treated at the dispensary. The months of January, February, April, May, June, and August show the largest number of malarious fever treated, but there was no general outbreak of the disease in an epidemic form in the district during the year. Other diseases treated were rheumatic affections, anæmia, diseases of the respiratory and digestive systems, and skin diseases. The collections, amounting to Rs. 638·17, were deposited in the Colombo Kachcheri.

(6) *Garden Fund.*

The receipts from garden produce, Government allowance, and expenditure on betel, &c., during the year were as follows :—

					Rs. c.
Receipts from garden	...	...	...	...	1,142 99
Government allowance	...	...	...	...	770 11
			Total	...	1,913 10
Expenditure on betel, &c.	...	...	...	...	1,579 54½
			Balance	...	333 55½

(11) REPORT of the Port Surgeon, Mr. H. A. Keegel, L.R.C.P. Edin.

I HAVE the honour to submit my report for the year 1902. The year has been a most satisfactory one as regards the immunity of the port from infectious diseases. The restrictions as regards plague and its prevention were unaltered, and strictly carried out. Only one case of plague was reported at this port during the year, and that a mild one in a state of convalescence. The patient, a lad in the employ of the M. M. Company on board the ss. Polynesian, evidently derived the infection at Hongkong, and was attacked with the disease immediately after the ship left Singapore. The glands affected were those of the axilla and neck, and the patient was on arrival at Colombo in a state of convalescence. The vessel was placed in strict quarantine, and took in coals, water, and stores by means of her own crew and left for Galle, where the patient and a party of Chinese passengers for Ceylon were landed. The vessel then proceeded on her voyage to Europe.

The ports of Calcutta, Bombay, Kurachee, Mangalore, Mauritius, and Hongkong remained foul throughout the year. The plague was prevalent for a considerable part of the year at Sydney. Linen from steamers arriving from all these ports landed here for washing was in every instance disinfected at Kochchikada. All native passengers from infected areas arriving here had their persons and belongings disinfected before they were allowed on shore. European passengers under ten days from infected areas landed on bonds and after disinfection of soiled linen, but all native passengers arriving here before the expiry of their quarantine period, excepting those specially exempted, were either placed on the hulk in harbour, if over eight days, or otherwise sent to Ragama to complete quarantine.

Disinfection.—The two Thresh's steam disinfectors at Kochchikada worked very satisfactorily throughout the year. The total earnings amounted to Rs. 5,840·80, as against Rs. 2,422·50 during 1901. The total number of persons, including passengers, coolies, and tally clerks, who underwent personal disinfection at the Kochchikada station was 26,095, made up as follows :—

Cargo coolies	...	...	...	...	21,103
Tally clerks	...	...	...	...	2,216
Passengers	...	...	...	...	2,776
			Total	...	26,095

and the number of cradles of soiled linen passed through the disinfectors was 4,804½, as against 948 in 1901. There was during 1902 a reduction in the rate charged per cradle to Re. 1·25 from Rs. 2·50 for less than thirty cradles; and a half rate of 62½ cents per cradle, if over thirty cradles be disinfected from the same ship. The disinfecting station is suitable, and no additional accommodation seems at present necessary.

Quarantine Hulk.—The immigration barque "Sultan Secundra" was for a great part of the year at my disposal for the purpose of quarantine, except when occasionally required for other public purposes. The persons placed on this ship were all natives under ten days from plague-infected areas, and having less than three days to complete their period of observation. The majority of these were relief crews awaiting the arrival of the ships for which they were intended. The arrangement was most convenient, and obviated the conveyance of large parties of men and enormous quantities of luggage by railway to Ragama for a couple of days. All persons having more than three days to put in were sent to Ragama.

European passengers and others specially allowed to land by the Chairman of the Plague Committee on bonds under ten days from an infected area, as a rule, submitted to the restrictions and conditions imposed without any apparent hardship to themselves. A few cases where neglect was evident were prosecuted for breach of the regulations, and fines varying from Rs. 20 to Rs. 75 were imposed.

Scarlet Fever.—This disease was reported from three vessels during the year, viz., the "Ormuz" on the 28th May, the "Congella" (two cases) on the 6th October, and the "Ophir" on the 30th October. Strict quarantine was imposed in every instance, and the mails and saloon passengers only were landed, the latter on the usual bonds and after disinfection. Coals, cargo, and stores were taken on board by the ships' crews, and no communication was allowed with them.

Cholera prevailed in South India epidemically from time to time, and all deck passengers arriving here during such times certified to have come from cholera-infected areas underwent a quarantine of five days. Only six cases occurred in port. Of these, only two were landed and

removed to hospital, where they were admitted as cases of acute diarrhœa. The rest proved fatal. One was buried ashore, having died at the cooly depôt, and the others were taken out to sea and dumped by the vessel in which they arrived.

Smallpox.—Two cases of a confluent type were landed here, one from the ss. Howick Hall from Calcutta, the patient being the chief officer of the ship. The case proved fatal. The other case was from the French mail steamer from Marseilles (ss. Ville de la Cité). The patient recovered.

Eight cases of chickenpox and six cases of measles were sent to the Infectious Diseases Hospital during the year.

Bills of Health.—The following is a summary of the revenue from this source:—

Outstanding at end of 1901	...	...	...	...	8
Issued during the year	...	...	...	...	1,453
				Total	1,461
Deduct free bills	...	...	...	...	85
Outstanding at end of 1902	...	...	...	...	3
					88
				Balance	1,373

At Rs. 10.50 each = Rs. 14,416.50.

This sum went to the credit of Government. The amount collected during 1901 was Rs. 13,597.50.

Vaccination was carried on throughout the year at the cooly depôt. All Tamil labourers other than estate coolies arriving by the steamers from Tuticorin and Ammapatan who bore no satisfactory marks of vaccination were vaccinated before they were allowed to go away. 7,712 persons were operated on, but no results can, under the circumstances, be expected to be recorded.

General.—No change took place in the *personnel* of the staff during the year. I desire to record my satisfaction of the manner in which the Assistant Port Surgeons did their work; I also received much assistance from the Police, and found I could always rely upon the co-operation of the various steamer agents in carrying out the regulations.

(12) REPORT of the Registrar, Ceylon Medical College, Dr. A. J. Chalmers, F.R.C.S. London.

THIS year has been one of rapid progress, and if 1903 show as much progress the College will be a small but properly equipped medical school in 1904 or 1905.

All the students of the College are now properly registered in England, and all have proper certificates for the classes which they have attended in the College.

Certificates as an apothecary of the Ceylon Medical College have now been issued to all persons who, having passed the Final Apothecaries' Examination, made application for them.

President of the College.—For a long time the Medical College has been without a President, and I think that the most important event of 1902 with regard to the College is the gracious act of His Excellency the Governor Sir West Ridgeway, G.C.M.G., K.C.B., K.C.S.I., in consenting to become the President of the College.

The Council.—Early in 1902 an appeal was made to the Government to grant a Charter to the College, and a reply was received that as soon as the College was placed upon a proper footing with regard to teaching, apparatus, and laboratories, application for this Charter was to be made again. Application will therefore be made in 1903.

Lectures.—The first improvement was the appointment of Mr. S. C. Paul, M.B. (Madras), F.R.C.S. (England), as lecturer on Anatomy. He is the first lecturer to be appointed who devotes his time to teaching in the College. Under his care the students have begun to study practical anatomy systematically, and I feel sure the benefit of this will be seen in time to come. Personally, I cannot speak too highly of the great help and assistance which I have received during the past year from Dr. Paul in all matters connected with the College.

The next appointment was that of Mr. A. Willey, D.Sc. (London), F.R.S., to be lecturer on Biology. It needs no words of mine to draw attention to the great benefit which the College has derived from having so distinguished a scientist as Dr. Willey associated with its work. The great and increasing importance of animals and plants as a cause and a means of spreading disease necessitates a good and practical knowledge of biology by the students.

This year the Government has voted the necessary money for the following new lecturers:—

Professor of Pathology and Bacteriology.—This gentleman will, it is hoped, be obtained from Europe, and will be a trained Pathologist, and will devote his whole time to his duties.

Lecturer on Clinical Medicine.

Lecturer on Practical Pharmacy.

Lecturer on Clinical Surgery.

Lecturer on Hospital Forms.

The new lecturers will be appointed early in 1903. The lecturer on hospital forms was appointed in April, 1902, without remuneration, but in 1903 will receive remuneration.

The teaching of practical pharmacy has been neglected up to the present, but it is hoped that in future this will be altered.

Lecturer on Dietetics.—With great kindness Dr. Sinnatamby consented to give a course of lectures on dietetics without remuneration.

Lecturer on Skiagraphy.—Dr. Attygalle kindly undertook to give some lectures in skiagraphy without remuneration.

Demonstrators.—Demonstrators in biology and anatomy have been appointed. A new Assistant for Biology, &c., has been appointed, and a librarian for the Students' Library.

Buildings.—Great changes have been effected in the buildings, which were merely lecture halls, and which have been converted into one large lecture hall, fitted at private expense with punkahs and incandescent lamp.

Laboratories: Physiological, Biological, Chemical.—The Physiological Laboratory was formed from an open recreation room called the Paulusz Hall, and is well fitted as a Physiological Laboratory,

and is called the Paulusz Physiological Laboratory. The Biological and Chemical Laboratories have been formed from lecture halls fitted with gas, benches, and lockers. A good photographic room has been made from a small empty room. A new building has been erected for pathological and anatomical work.

A porch has been erected privately over one of the doors of the College, and another porch over another door has been promised by the British Medical Association and the Colonial Medical Library. The exterior of the College has been lighted by incandescent gas privately.

A large number of trees have been cleared from the front of the College, thus making it easily seen from the road and preventing damage to the roofs of the College.

Apparatus.—A large indent for apparatus for chemistry, biology, anatomy, physiology, pathology, materia medica, midwifery, surgery, ophthalmology, and hygiene has been sent to England, and will, it is hoped, be received early in 1903.

A certain quantity of biology, chemical, physiological, and pathological apparatus have been received during the year. All this apparatus is required to render the teaching more practical.

Old surgical instruments returned from the hospitals have been converted into the nucleus of a collection of surgical instruments.

Diagrams.—A number of diagrams to illustrate lectures have been made during the year, and it is hoped that in time every course of lectures will be well illustrated by diagrams.

Books for the Library.—A large quantity of books for the Students' Library have been received, and have yet to be received.

A number of anatomical plates have been framed and hung round the Students' Library.

Requirements.—A building, plans of which have been made by the Public Works Department, is urgently required containing a—

Lecture room	Students's lavatory
Chemical laboratory	Anatomical, Materia Medica, and Hygiene
Physical laboratory	Museum
Students' common room	

The present chemical room is very small, and is used for—

Chemistry	Physiological Chemistry
Physics	Pathological Chemistry
Medical Jurisprudence	Practical Pharmacy

Work of the College: Students.—At the end of the year there were 87 medical and 37 apothecary students in the College; total 124.

Fees.—The total fees for the year were about Rs. 16,000.

Prize Examinations.—The medals in anatomy, physics, materia medica, and medical jurisprudence were awarded.

Examinations.—Twenty candidates passed the Medical Preliminary Examination; Mr. E. C. Spaar obtained the Government Scholarship.

12 passed the First Professional in May	5 passed the Second Professional in July
12 passed the First Professional in July	6 Third Professional, Part I, in May
3 passed the Second Professional in May	1 Third Professional, Part I, in July.

(13) REPORT of the Medical Officer in charge of the Lady Havelock Hospital, Mrs. M. N. Fysh, M.B., London.

I HAVE the honour to submit my annnal report for 1902.

The total number of patients treated was again larger than in any previous year, being 1,072, compared with 1,030 last year. This was in spite of the enforced idleness of one or other of the wards for many weeks in the spring, owing to repairs and re-cementing the floors. The children among the patients numbered 320, compared with 256 in 1901, 191 being girls and 129 boys. The number of Mohammedan women keeps about the same, 48 being treated this year against 49 last year. The number of cases of diseases peculiar to women was 124. There were 22 cases of enteric fever, with 8 deaths, giving a death-rate of 36.3 per cent. There was just double the number of cases, and approximately the death-rate was doubled, as compared with last year. In the first eight months of the year 12 cases were admitted, with 2 deaths only, while from September to December 10 cases occurred, with 6 deaths, all being of a severe type, 3 with meningitis.

Of dysentery, there were 24 cases, with 7 deaths, the rate being lower than that of typhoid, though higher than last year, 29 per cent.

The number of operations under chloroform was 40, with 1 death. This was in a case of malignant disease of the cervix uteri. The recoveries include 2 cases of ovariectomy for very large cysts, one being in a woman of great age, whose descendants number 42, four being great grandchildren. This old woman, though she nearly died on the table, and only recovered after artificial respiration had been carried on for ten minutes, made a remarkably rapid and complete recovery. She left the hospital seventeen days after the operation, and has since enjoyed perfect health and vigour. The other ovariectomy was also of interest, as it was done during pregnancy (two months), which continued uninterruptedly after the operation, until in the sixth month the patient rashly made a rough and tedious journey, which brought on a premature labour. She is now in the best of health.

The Nursing Staff and Training School.—This year has been a very difficult one for the nursing staff, as so many changes have unavoidably taken place, and during most of the year the staff has been very short-handed.

In April an examination was held, when two nurses obtained certificates, and two months later were sent on to outstations.

On 8th July Miss Wollen left for England on three months' leave, and to my very great regret resigned her appointment in October owing to ill-health.

Four nurses came for short periods, but were found unsuitable.

I very much regret to say that pupil nurse Jenkins was attacked with typhoid fever in August, and died with symptoms of meningitis on 9th September. She was a promising young nurse, and her death was a loss to the nursing staff.

Branch Hospital.—The total number of patients treated here was 238, being 60 less than last year. One death occurred. Several patients were sent on when cured to the Salvation Army Rescue Home, where some of them have done well. I have set aside one ward for married and respectable patients, and a good many have taken advantage of the arrangement who would not otherwise have stayed in this hospital for treatment.

Outdoor Dispensary for Women and Children.—The number of patients here was 15,678, being 829 fewer than last year. A great number of the out-patients come from considerable distances, *e.g.*, from Negombo, Mount Lavinia and beyond, Matara, Henaratgoda and beyond, and a few from remoter parts of the Island. The number of children was 3,448, as compared with 2,253 in 1901, so this department has increased. The number of boys seen was 1,463, compared with 872 last year. The number of patients treated for worms forms a large proportion of the whole, being 2,683, or about one in five. I find that almost every case of anæmia is directly traceable to this cause. The other ailments treated were chiefly troubles due to pregnancy and the puerperium, uterine displacements, chronic constipation, scabies, malarial fevers, and rheumatic pains. Not one case of chorea has occurred here during the last three years among over 50,000 patients, and only two of rickets. In fact, most of the diseases which are very commonly seen in England seem to be rare in Colombo. Those troubles which occur in common, moreover, run a more acute and rapid course in this country. I would instance pulmonary phthisis, of which I have not yet seen a chronic case with cavities in Ceylon. This seems strange, as the disease is so comparatively common; 20 cases were seen here last year, 10 cases of cancer, and 11 of leprosy.

REPORT of the Medical Superintendent of the De Soysa Lying-in Home,
Dr. M. Sinnatamby, M.D. Brux., F.R.C.S.

I HAVE the honour to submit my annual report of the above institution for the year 1902. The total number of patients treated during the year was 737, as against 499 in 1901 and 162 in 1890. Of the total number treated, 695 were discharged cured, 2 removed by relatives, and 4 transferred to the General Hospital relieved, 9 died, and 16 were remaining at the end of the year. The percentage of deaths to total treated was 1.25. Of the 9 deaths recorded, 2 were due to diarrhœa, 1 to dysentery 2 to eclampsia, 2 to exhaustion from protracted labour, 1 to anchylostomiasis, and 1 to cerebral hæmorrhage. Of the 12 cases of puerperal eclampsia admitted, 2 proved fatal, giving a percentage of 16.66. Of these two deaths, one was admitted in a moribund condition (patient dying in about an hour after admission), and the other died not of eclampsia, but of œdema of the lungs, which supervened on the fourth day after admission. I am able to record good results again on the thyroid treatment of puerperal eclampsia.

After the appearance of my paper in the *Indian Medical Gazette* I am glad to observe that some of the maternity hospitals in India have adopted the treatment introduced by me with gratifying results. I have again to draw the attention of the profession that anchylostomiasis is a very serious complication of pregnancy.

Ten cases of placenta prævia were admitted during the year, without any fatal results. Of the 718 admissions, 709 were admitted before delivery and 9 after delivery. Only 20 were admitted before commencement of labour.

Subjoined I give in tabular form the various classifications of obstetric cases :—

Table I.—Classification of Obstetric Cases.

Class.	Division.	Subdivision.	Admitted.
Natural	{ Purely natural Variety	... { Occipito anterior	... 478
		... { Occipito posterior	... 16
			— 494
Difficult	{ Tedious Laborious	... Natural powers, over 24 hours	... 2
		... { Forceps (face)	... 112
	{ Obstructed	... { Padalic version for placenta prævia	10
		... { Symphyseotomy (small round pelvis)	2
		... { Craneotomy (face)	1
		... { Craneotomy (hydrocephalus)	2
		... { Flat pelvis (forceps)	5
			— 134
Preternatural	{ Inverted	... { Breech	... 11
		... { Foot	... 7
	{ Transverse Compound	... { Arm (version)	... 4
		... { Shoulder (version)	... 3
		... Head and hand	... 4
			— 11
Complex	{ Plural births	... { Twins (version)	... 6
		... { Triplets (premature)	... 1
	{ Abortion Descent of the funis	... —	... 11
		... —	... 3
	{ Anti-partum hæmor- rhage	... { Accidental (4)	...
		... { Placenta prævia (10)	...
	{ Post-partum hæmor- rhage	... { Primary (5)	...
		... { Secondary (2)	...
	{ Retained placenta	... { Simple retention (6)	...
		... { Morbid adhesion (7)	...
	{ Ruptures	... { Rupture of cervix (5)	...
		... { Rupture of perinæum (14)	...
			— 21
		Delivery before arrival	... 9
		Spurious	... 50
			—
		Total	... 737

Table II.—Classification of the Diseases complicating Pregnancy at the time of Delivery.

General diseases ...	{	Anchylostomiasis	...	...	...	14
		Dysentery	...	...	...	10
		Syphilis	Primary	...	...	15
			Secondary	...	...	10
		Malarial fever	...	...	10	
		Eclampsia	...	...	12	
		Parangi	...	...	4	
	{	Cerebral hæmorrhage	...	...	...	1
Diseases of the circulatory system : Morbus cordis			...	...	...	1
Respiratory diseases	{	Asthma	...	...	...	4
		Pleurisy	...	...	...	2
Digestive system : Diarrhœa		...	...	...	...	15

Table III.—Mortality Table.

Mothers ...	{	Recovered	...	...	...	728
		Died ...	...	...	...	9
Children...	{	Born alive	...	...	...	612
		Born dead	...	...	...	83

Table IV.—Obstetric Operations.

Class.	Division.	Subdivision.	Admitted.
Forceps	...	{	Difficult ... { Brow 2
			Head (symphyseotomy 2) ... 112
		{	Complex ... { Twins ... 3
			Prolapse of cord ... 4
			Preternatural Compound ... { Head and hand ... 3
Version podalic ...	{	Complex ... { Placenta prævia ... 10	
		Twins ... 2	
		Premature births ... { Small head ... 7	
Craneotomy ...	Difficult	{	Face 1
			Hydrocephalus (head) 2
Symphyseotomy...	Obstructed	Head (2)	
Evacuation of uterus	{	Abortion	Removal of ovum and placenta ... — 14
Separation and removal of placenta		Complex	Morbidly adherent placenta ... — 10
Acceleration of labour by water bags	{	Complex	{ Placenta prævia ... 6
			{ Puerperal eclampsia ... 2
			8
Total ...			178

Table V.—Presentation and Position classified.

Vertex	...	{	First	505
			Second	...	...	...	48
			Third	...	...	...	30
			Fourth	...	...	...	10
Breech	...	{	First	...	...	...	6
			Second	...	...	...	3
			Third	...	...	...	2
Face	...	First	...	...	...	2	
Brow	...	First	...	...	...	2	
Transverse	...	{	Dorso anterior	...	...	...	4
			Descent of funis	...	...	...	3
Complex	...	Twins	{	Both vertex	...	...	4
				Breech and vertex	...	...	2
				Breech and foot	...	...	1
Placenta prævia	...	...	...	...	...	10	
Compound, head and hand	...	...	...	...	...	15	
Premature	...	...	...	...	...	20	
Abortion	...	...	...	...	...	11	
Delivered before arrival	...	...	...	...	...	9	
Spurious	...	...	...	...	...	50	
Total								737

Of the 178 operations performed, the 2 cases of symphyseotomy require special mention. The admissions have more than quadrupled within the last ten years ; the increase from 499 in 1901 to 737 in 1902 is a material one (nearly 47 per cent.). The popularity of the institution can be gauged by the number of Mohammedan patients admitted during the year. This has increased from 8 in 1901 to 20 in 1902.

The Lying-in-Home, as a training institution, is doing excellent work. The European method of conducting labour, which has been denied hitherto to the poor villagers, will gradually be introduced by the approval and adoption of my proposal for admission of native pupil midwives from villages of various Provinces. To ensure a thorough success great care and forethought are necessary in the selection of fit candidates, and this can only be effected by the co-operation of the medical officers and Government Agents of the various districts. The number of native pupil midwives has been increased from four to six from the commencement of 1902. There are over 100 candidates registered for admission as pupil midwives from various Provinces. I would therefore beg to submit in this connection that the number may be further increased to eight. Government sanctioned four pupil midwives at a time when admission into this institution was barely a hundred. The admissions have since increased by almost seven-fold. As there are no ward attendants, this increase to eight pupils to meet the growing popularity of the institution is an absolute necessity, apart from the point of view of speedily introducing European midwifery practice into villages.

This institution also trains midwives, who generally belong to the European or Burgher community, on payment of fees, as their usefulness is generally restricted to the well-to-do class of people in towns, *vide* table below :—

Table VI.

			Remained from 1901.	Admitted during 1902.	Passed in 1902.	Out of those passed.			
						Sinhalese.	Tamils.	Burghers.	Europeans.
Paying pupils	...	...	3	3	4	—	—	2	2
Free pupils	...	...	1	4	1	1	—	—	—
Stipend pupils	..	...	4	7	8	7	1	—	—
Total			8	14	13	8	1	2	2

Equipments.—*Vide* my report for 1901.

Staff requires to be increased by an assistant matron and a permanent dispenser. *Vide* my report for 1901.

Accommodation has been increased by the construction of a new ward for septic cases and an operating room.

To prevent overcrowding it will be necessary to occupy the entrance block, which will necessitate building of quarters to the matron and an administration block. The labour wards also require to be increased by four rooms.

I cannot close this report without bearing testimony to the efficient work done by the matron.

(15) REPORT of the Acting Director, De Soysa Bacteriological Institute, Dr. S. C. Paul,
M.B. Madras, F.R.C.S., England.

THE work of this institution was carried on for the greater part of the year by Mr. Joseph de Silva, M.B., D.P.H. I took charge of the work from the 15th September. Dr. Van Houtun, the Boer prisoner of war, continued to work in the institute till August of this year, when on the declaration of peace he returned to Holland. He completed his researches on the bacillus which he isolated from leper cases and successfully cultivated in a mixture of fish and peptone broth. The results of his researches are embodied in a paper contributed by him to the Journal of Pathology and Bacteriology (No. 3, vol. VIII.). The bacillus that he has isolated differs both in size and staining properties from Hansen's leper bacillus. He has observed the Pfeiffer-Bordet reaction in vitro by mixing leper serum with broth cultures of the bacilli in dilutions of 1 in 100. His researches, however, cannot be regarded as complete. Further investigation is necessary either to establish the identity of this bacillus with Hansen's bacillus, the differences at present observed being probably due to the variations in the nature of the media, or, if they are different, to ascertain which of the two is the causative agent in leprosy. The Pfeiffer-Bordet reaction does not establish this point, as this reaction may be given if Van Houtun's bacillus is constantly present in association with Hansen's bacillus in leper cases.

The routine work of the institute consisted chiefly in the testing of blood for Widal's reaction and sputum for tubercle bacilli. The great bulk of the work was undertaken for the Government Civil Hospital of Colombo. Since the 17th January a small fee was charged for examining and reporting on specimens sent by Municipalities, Local Boards, and private practitioners. No fee was charged for work done for the various Government institutions and the Military Department. The total number of specimens examined during the year amounted to 923, as compared to 287 in 1901, an increase of 636 for the year. Appended below is a tabulated list of the specimens examined :—

Blood for Widal's reaction	...	...	...	...	488
Blood for streptococci	...	...	...	...	4
Blood for malarial parasites	...	...	...	...	19
Blood for plague bacillus	...	...	...	...	2
Bacteriological examination of vaccine lymph	...	...	...	...	7
Bacteriological analysis of water	...	...	...	...	4
Contents of stomach for sarcinae	...	...	...	...	1
Contents of intestines for cholera vibrios	...	...	...	...	23
Membrane for diphtheria bacillus...	...	...	...	...	2
Milk for typhoid bacillus	...	...	...	...	1
Nasal secretion for leper bacillus	...	...	...	...	6
Saliva for plague bacillus	...	...	...	...	1
Soil for typhoid bacillus	...	...	...	...	1
Sputum for tubercle bacillus	...	...	...	...	357
Urethral discharge for gonococci	...	...	...	...	6
Urinary deposits	...	...	...	...	1

Of the 488 cases examined for Widal's reaction, a positive result was obtained in 215 cases. In the majority of these cases the reaction was obtained during the second week of the fever. In a few cases the reaction was not obtained till the fourth week of the fever. I am sorry to state that there has been a falling off in the number of specimens sent by private practitioners for Widal's reaction ever since the prosecution of some of the medical men of Colombo by the Colombo Municipality for not reporting cases of enteric fever.

Although twenty-three specimens were carefully examined for cholera vibrios, a negative result was obtained in all the cases. These specimens were all forwarded from cases presenting the clinical signs of cholera. A large variety of organisms were found to be present. Further investigation is necessary to determine the specific organism. The symptoms may be due to toxic material produced by the large variety of organisms present, in which case a specific bacterium may not exist.

The following list shows the number of specimens received from the various institutions :—

Government Civil Hospital, Colombo	...	...	...	532
Lady Havelock Hospital	...	...	...	95
Borella Convict Hospital	...	...	...	101
Military Department	...	...	...	26
Police Hospital, Colombo	...	...	...	33
Boer Camps	...	...	...	25
Outstation Hospitals	...	...	...	4
Private Practitioners	...	...	...	100
Vaccine Department	...	...	...	7

The fees received during the year amounted to Rs. 380 ; of this, the Government has waived Rs. 79.50 ; Rs. 298 was deposited in the Bank of Madras on Government account ; Rs. 2.50 is still in arrears. If the work done for the Military and the Boer Camps was charged for, the institute would have realized another Rs. 258.50.

Mr. Arthur C. de Silva, my Assistant, has done good work during the year. He has acquired the necessary skill in bacteriological technique. In view of the special nature of the work, I would recommend that he should be put on the same footing as the Assistant to the Lecturer on Physiology at the Ceylon Medical College.

(16) REPORT of the Chief Medical Officer, Prisoners of War Camp at Diyatalawa,
Mr. T. F. Garvin, M.B., C.M.

1.—GENERAL.

(a) Strength.

ON the 31st December, 1901, the number of prisoners of war in the camp at Diyatalawa was 4,006. There were no fresh arrivals since. The strength of the camp at the end of each month and the daily averages were as follows :—

Month.				Strength at end of each Month.				Daily Average for the Month.
January	...	...	...	4,036	...	...	...	4,014
February	...	...	...	3,961	...	...	...	3,985
March	...	...	...	3,993	...	...	...	3,973
April	...	...	...	3,963	...	...	...	3,962
May	...	...	...	3,966	...	...	...	3,961
June	...	...	...	3,980	...	...	...	3,964
July	...	...	...	3,603	...	...	...	3,818
August	...	...	...	3,197	...	...	...	3,448
September	...	...	...	3,192	...	...	...	3,192
October	...	...	...	2,658	...	...	...	2,979
November	...	...	...	2,695	...	...	...	2,712
December	...	...	...	20	...	...	...	1,074

(b) Climate and Meteorology.

The following is a summary of the meteorological observations of most interest made during the year :—

Month.		Adopted Mean Temperature of Air for Month.	Highest Maxi- mum in Shade.	Mean Maxi- mum in Shade.	Lowest Mini- mum in Air.	Mean Mini- mum in Air.	Mean Degree of Humidity (Satura- tion = 100).	Rainfall.	Average Sunshine per Day.	Mean Amount of Cloud. 0—10
		°	°	°	°	°	°	In.	Hours.	
January	...	66	77.8	72.9	49	55.5	68	8.83	8.3	4
February	...	68.1	79.2	75.4	50.8	57.5	65	1.22	8.6	4.5
March	...	71.2	83	79.2	49.8	57.5	60	1.82	9.2	4.5
April	...	71.6	83	79.4	55.4	60.8	70	7.80	7.2	6
May	...	73.4	85.2	81.1	59	61.6	68	4.87	8.2	4.5
June	...	73.2	85.2	80.5	57.8	61	62	3.90	9.5	3.5
July	...	72.5	83.2	79.2	54	61.4	55	0.84	9.6	4.5
August	...	72.3	84	79.6	59	61.4	63	3.95	8	4.5
September	...	71.8	83.2	79.6	56	61.1	63	3.96	7.5	5.7
October	...	69	79	75.6	56.5	60.6	76	20.23	5.6	6.5
November	...	68.3	79	75.1	58	60.7	78	14.33	5.6	7.4
December	...	65.6	78	74.1	54	59.1	80	6.20	6.3	6
For the year 1902		70.2	85.2	77.6	49	59.8	67	77.95	7.8	5.1

(c) Sick Rate.

The total number of sick treated in the various hospitals in the camp during 1902 was 718. Of this number, 48 remained over on the 31st December, 1901, and 670 were new admissions during 1902.

The following table shows the average strength of the camp from month to month, the numbers admitted to hospital, and the ratio of sick to the average strength per 1,000 :—

Month.	Average Strength of Camp.		No. of all Cases admitted to Hospital.		Ratio of all Sick to Average Strength per 1,000.	
January	4,014	...	46	...	11.46
February	3,985	...	48	...	12.04
March	3,973	...	52	...	13.09
April	3,962	...	51	...	12.87
May	3,961	...	66	...	16.66
June	3,964	...	60	...	15.13
July	3,816	...	69	...	18.08
August	3,448	...	77	...	22.30
September	3,192	...	67	...	20.99
October	2,979	...	61	...	20.47
November	2,712	...	55	...	20.29
December	1,074	...	18	...	16.75
For the year	3,423	...	670	...	196

(d) Mortality Rate.

The total number of deaths during 1902 was 26. Of these, 6 resulted from enteric, 9 from dysentery, and 11 from all other diseases.

The following table shows the ratio of all deaths to the average strength of the camp per 1,000 :—

Month.	Average Strength of Camp.		No. of Deaths from all Causes.		Ratio of all Deaths to Average Strength per 1,000.	
January	4,014	...	—	...	—
February	3,985	...	—	...	—
March	3,973	...	1	...	—
April	3,962	...	1	...	0.25
May	3,961	...	1	...	0.25
June	3,964	...	3	...	0.75
July	3,816	...	5	...	1.47
August	3,448	...	4	...	1.16
September	3,192	...	2	...	0.62
October	2,979	...	2	...	0.67
November	2,712	...	4	...	1.47
December	1,074	...	3	...	2.79

Taking 3,423 as the daily average strength for the whole year, the mortality rate is 7.59 per 1,000.

2.—MEDICAL.

(1) Staff.

Professional.—The professional staff was reduced during the year by the transference of Assistant Medical Officer H. Leembruggen, L.M.S. (Ceylon), to Urugasmanhandiya Camp in January. At the end of the year Mr. Prins, L.M.S. (Ceylon), was transferred to Mount Lavinia, and Mr. Keyt, L.M.S. (Ceylon), was seconded for service as Civil Surgeon under the Military at Diyatalawa.

Nursing.—Nurses Von Dadelszen and Nell were discontinued at the end of November. The prisoners of war orderlies were reduced in number as the admissions to hospital diminished, and they were all eventually discontinued on the 20th December. Two soldier orderlies, privates of the Royal West Kent Regiment, have done duty since, and were on the staff at the end of the year.

(2) General Health.

The general health of the camp was satisfactory, particularly during the early months of the year. Enteric was wholly absent till April, when there was a re-appearance of the disease. Dysentery, though prevalent in moderate numbers throughout the year, assumed a very bad type towards its end, and contributed largely to the mortality during the period.

(3) Outdoor Dispensary.

The total number of cases treated at the outdoor dispensary consisted of 994 patients, making 2,660 visits, or an average of 7 per day.

(4) Diseases treated in the Hospitals.

The total number of cases treated in the various hospitals during the year was 718. Of these, 26 died, 689 were discharged, and 3 remained under treatment.

Dysentery.—The total number of cases of dysentery treated was 95, of which 94 were admitted during the year. Of these, 9 died, a mortality rate of 9.4 per cent. As already stated, the type of disease became worse towards the end of the year, when a large proportion of the deaths from this cause occurred.

Malarial Fever.—The total number treated was 35. All recovered.

Debility.—In all 140 cases were treated. There was one death from this cause. Most of the cases occurred among the old and infirm, and usually improved on being taken out of the camp and transferred to the convalescent hospital and placed on a liberal and easily digested diet.

Nervous Diseases.—Two cases of mania and three of melancholia were treated during the year. They were eventually transferred to the Lunatic Asylum, Colombo, for safe custody and expert treatment. One death occurred from tumour of the brain.

Circulatory Diseases.—One death occurred from valvular disease of the heart: the patient was a long time under treatment, with, at the beginning, some improvement. The immediate cause of death was dropsy.

Respiratory Diseases.—There were 20 cases, with three deaths. The deaths resulted from acute pneumonia (two cases) and bronchitis (one case).

Digestive Diseases.—Total treated 244. Of these, 3 died: 2 from intestinal obstruction and 1 from peritonitis.

Venercal Diseases.—One case of ulcer of the penis was treated in the hospital. A few cases of gonorrhœa and syphilis received treatment at the outdoor dispensary.

Enteric.—Total treated 46; deaths 6; mortality rate 13·04 per cent. The camp was free of enteric for the first three months of the year. A small outbreak then occurred, traceable to the drinking of polluted water at Haputale. I have already reported in detail regarding the etiology of this small outbreak in my report in August last.

Operations.—In all 31 operations were done during the year. There was one death, a case of intestinal obstruction, in which lapenotomy was performed.

3.—SANITARY.

Drainage.—The drainage of the camp was satisfactory, and did not necessitate any new works.

Water Supply.—The supply of water was ample throughout the year.

Food.—The rations of the prisoners of war were good, and were daily examined by a board in which the Medical Staff of the camp was represented.

Removal of Excreta.—This duty was efficiently performed.

(17) REPORT of the Medical Officer, Prisoners of War Camp at Mount Lavinia, Mr. V. van Langenberg, L.R.C.P., M.R.C.S.

General.—The strength of the camp on the 31st August, 1902, was 85, including three prisoners of war who had arrived on three days' parole from Urugasmanhandiya. The number in camp on 1st September, 1901, was 149. 245 convalescents arrived during the year from Diyatalawa, 12 from Ragama, 1 from Hambantota, 2 from the Lunatic Asylum, Colombo, and 3 from Urugasmanhandiya on parole. 235 returned to Diyatalawa and 4 to Ragama, 83 were transferred to Urugasmanhandiya, and 5 died during the year: 1 in camp, 3 in the General Hospital, Colombo, and 1 in the Lunatic Asylum. The average stay of a prisoner of war in the camp was about four months.

General Health.—The general health has been very satisfactory, and the prisoners of war have continued to derive great benefit from the change. Three prisoners of war were sent back to Diyatalawa on my recommendation, as they did not improve by the change here. Two were suffering from chronic diarrhœa and one from chronic bronchitis. The number treated at the outdoor dispensary was 1,775, as follows:—

Month.			First Visits.	Subsequent Visits.	Total.
1901.					
September	...	...	163	66	229
October	...	...	139	50	189
November	...	...	89	24	113
December	...	...	44	15	59
1902.					
January	...	...	100	32	132
February	...	...	101	52	153
March	...	...	97	35	132
April	...	...	129	61	190
May	...	...	135	62	197
June	...	...	98	49	147
July	...	...	104	22	126
August	...	...	80	28	108

the daily average treated being 4·86, and the monthly average 147·91. The diseases treated were of minor importance, and chiefly due to gastro-intestinal irritation, with a few cases of malarial fever and dysentery of a mild type.

Hospital.—Forty-one cases were treated in the detention ward, which has accommodation for three patients; of these, 3 were cases of dysentery, 5 of intermittent fever, 2 abscess of the liver, 7 diarrhœa, 1 cystitis, 2 heart disease, 2 pernicious anæmia, and 1 concussion of the brain. Sixteen were transferred to the General Hospital, Colombo, 2 of these being abscess of the liver, 2 cancer of the stomach, 1 hydatid cyst of the lung, and 1 pernicious anæmia.

Deaths.—One death occurred in the camp during the year from "pernicious anæmia" in an old man who had been ailing a long time.

Water.—The drinking water is good, and was analysed four times during the year. There is a plentiful supply for bathing and washing purposes.

Food.—The food supplied has been of good quality, and complaints have been very few.

Latrines and Urinals.—These have been well kept, the contractor on the whole doing his work satisfactorily. Limestone has been substituted for broken brick in the urine pits, with very satisfactory results.

Drainage.—The drainage is good, two large surface cement drains carrying away the slops and storm water.

Buildings.—The huts were re-thatched in April, just before the burst of the south-west monsoon.

Exercise and Recreation.—Full advantage is taken of the mile of seashore which is at the disposal of the prisoners of war between the hours of 6 and 9 in the morning and 4 and 6.30 in the evening. Football continues to be the favourite pastime.

Clothing.—The clothing is inspected once a week, and the men are well supplied.

(18) REPORT of the Medical Officer, Prisoners of War Camp at Urugasmanhandiya,
Mr. E. W. Scharenguivel.

General.—This camp was opened on 11th September, 1901, on the arrival of 176 prisoners of war from Diyatalawa, and this number was increased from time to time by fresh arrivals. The strength of the camp at the end of each month of the period under review was as follows :—

1901.				1902.			
September	...	...	176	March	...	...	364
October	...	...	213	April	...	...	369
November	...	...	273	May	...	...	368
December	...	...	356	June	...	...	367
1902.				July	...	...	283
January	...	...	358	August (up to 10th)	...	...	13
February	...	...	365				

On 14th July 367 prisoners of war and on 7th August 370 prisoners of war left this for South Africa, the first batch leaving Colombo by the ss. Templemore and the second by ss. Englishman.

Sanitary ; Situation.—The camp is located on a hill with low-lying paddy fields surrounding. The surrounding country is well wooded, open, and the soil is gravelly, favouring drainage. The proximity of the sea renders the place much cooler and healthier than it would otherwise be. The railway station which serves it is at Kosgoda, a distance of nearly 4 miles by a metalled cart road.

Drainage.—The drainage is effectively carried out by means of several surface drains, which open into the low-lying fields and carry off the storm water.

Water Supply.—A large and deep well with a wall enclosure supplies the water for drinking purposes. The water is pumped into water carts, which are left in different parts of the camp. There is a plentiful supply, and its quality has been on several occasions analysed by the Government Analyst and pronounced to be pure and wholesome.

Food.—The food of the prisoners of war is of good quality. The cooking is done by native servants. Complaints have been few.

Dwellings.—Huts constructed of mud and wattle walls, with thatched roofs and earth floors. The side walls are 3 feet high, and the huts are lofty, allowing sufficient ventilation. The mess rooms have tables and benches fixed to the ground, with a thatched roof and half walls of cadjan for the sides. The huts are daily swept and cleaned, and the belongings of the prisoners of war put out and aired.

Washhouses and Baths.—Two washhouses provided with tubs, buckets, and tables are in use, the water being supplied by three or four surface wells. There is a bathroom with a cement floor and a thatched enclosure. The water is ample for bathing purposes, and prisoners of war avail themselves of it very freely.

Latrines and Urinals.—There are two sets of latrines and urinals situated at convenient and suitable sites in the camp. The dry-earth system is in force, and the solid excreta are carried some way off and deposited in shallow pits, which are covered over as the pits fill up. A galvanized iron trough is fitted in each urinal, which conveys the urine through a short pipe into an open cement drain, which in turn empties into a pit containing broken brick. These “bacteria beds” have worked very satisfactorily in camp and are free from smell. The brick dressing is renewed weekly and dried. The latrines have been excellently kept by the camp staff of coolies. The whole camp is inspected twice a week by the official staff, and matters needing attention promptly put in hand. From the favourable situation of the camp as regards ventilation and drainage, its sanitary condition has given no cause for anxiety or trouble. The refuse and sweepings from the camp are disposed of by removing them in carts to parts well away from the camp and burying them.

Exercise and Recreation.—The privilege the prisoners of war are given to go anywhere within a radius of 3 miles has been availed of freely. Special permits to a certain number daily are also granted to Kosgoda for sea bathing and to other places in the vicinity. In the way of outdoor games, cricket, football, and quoits were indulged in.

Clothing.—The prisoners of war are well provided with clothing suitable to the climate.

Climate and Meteorology.—Meteorological observations commenced on 29th October, 1901. The highest maximum temperature registered was 91, and the lowest 76. The highest minimum was 82, and the lowest 65. The total rainfall estimated from the 10th December was 80.69 inches. The wettest month was May, registering 23.11 inches; and the driest month February, with 4.11 inches. The hottest months were March and April. It will be noticed that the largest number of admissions were in June, just after the heaviest monthly rainfall.

Medical Staff.—I took over charge of the camp on the 11th July, 1902, on the departure of Dr. Leembruggen, who went in medical charge of the first batch of prisoners of war that returned to South Africa. Dr. Van Langenberg was in charge of this camp from the date of its opening, visiting twice a week from Mount Lavinia until early in January.

Hospital.—The hospital accommodation consisted of two wards with five beds in each.

General Health.—The general health of the camp was very satisfactory. The number treated at the outdoor dispensary was 2,022, making a daily average of 6.03. The following table shows the number treated for each month :—

1901.				1902.			
September	...	...	173	March	...	...	191
October	...	...	187	April	...	...	196
November	...	...	142	May	...	...	186
December	...	...	151	June	...	...	180
1902.				July	...	...	206
January	...	...	149	August (up to 10th)	...	...	100
February	...	...	161				

The nature of the cases treated was very mild, being chiefly minor ailments.

The number of admissions into hospital for the year was 242, as shown in the following table :—

1901.				1902.			
September	...	...	9	March	...	...	17
October	...	...	8	April	...	...	14
November	...	...	11	May	...	...	29
December	...	...	18	June	...	...	58
1902.				July	...	...	26
January	...	...	24	August (up to 10th)	...	...	5
February	...	...	23				

The daily average sick in hospital was 4·81, and the largest number of patients in hospital in any one day was 13 ; the smallest was 1. There were no deaths. Six cases were transferred to the General Hospital, Colombo, and 5 cases were sent to the Eye Infirmary, Colombo, for examination ; one of the latter was operated on at the infirmary for strabismus. Some cases of inguinal hernia came under notice, to whom trusses were provided.

Fever, Intermittent.—112 cases of this disease were treated.

Appendicitis.—One case, which gave cause for anxiety, was treated, and made a good recovery.

Dysentery and Diarrhœa.—Six cases of the former and 16 of the latter were treated. They were principally attributable to unwholesome food procured outside the camp and to climatic changes. One case of diarrhœa in a weak, emaciated, and elderly subject was transferred to the General Hospital Colombo.

Catarrhal Affections were prevalent generally during the wet months.

Chickenpox.—In June two cases of chickenpox occurred in camp, and were isolated in the segregation hut without further spread the disease was stamped out.

General.—Schools were established in the camp at Government expense and inspected by the Director of Public Instruction. Sites in the camp were allowed for gardening and carpentry, games were much encouraged by the officials, and this with the healthy and cheerful situation of camp tended greatly to the well-being of the men, who seemed very grateful and were contented.

The hospital nursing was satisfactorily carried out by the Boer orderly and native attendants.

(19) REPORT of the Medical Officer, Prisoners of War Camp at Ragama,
Capt. W. P. Gwynne, R.A.M.C.

I.—GENERAL.

Strength, 1901.				Strength, 1902.			
September 30	...	...	305	January 31	...	...	316
October 31	...	...	331	February 28	...	...	322
November 30	...	...	322	March 31	...	...	318
December 31	...	...	316	April 30	...	...	312
				May 31	...	...	306
				June 30	...	...	331
				July 31	...	...	217
				August 10	...	...	213

Since peace was declared the strength of the camp has been much reduced. This is due to the fact that arrangements were made by their respective Consuls for the return of all those foreigners who were desirous of proceeding to their own countries. The largest number of prisoners in the camp at any one time was in July, 1902, when there were 358.

II.—SANITARY.

(a) *Drainage.*—There are surface cement drains all over the prisoners' enclosures ; these have proved most satisfactory, having been tested by heavy rains.

(b) *Water Supply.*—The water is pumped from two wells close to the railway line into seven reservoirs holding 6,460 gallons in all. The water is of good quality as tested by analysis, and is sufficient for all requirements. It is distributed over the camp at standpipes. Two of the old cooly reservoirs have been utilised as swimming baths for the prisoners of war. On the 14th December chatty filters were instituted in the camp, two filters for each tent and two for each dining-room ; the sand and charcoal used are renewed from time to time ; they act very satisfactorily. An additional well was made during the year in case of a shortage of supply.

(c) *Rations.*—On the 3rd November, as it was found that much of the meat was left uneaten, the following ration was recommended, and is now in use :—

Beef or mutton	...	3 1/4 lb.	Tea	...	...	3/4 oz. or
Potatoes	...	11 oz.	Coffee	...	...	1 3/4 "
Fresh vegetables	...	3 "	Sugar	...	...	2 1/2 "
Rice	...	2 "	Salt	...	...	1/2 "
Bread	...	16 "	Pepper	...	...	1/2 "
Milk	...	4 "	Jam (weekly)	...	...	1/4 lb.
Peas or beans (dried)	...	4 "	Lime juice	...	...	1/2 oz.

This ration suits the prisoners far better than the old ; there has been less dyspepsia, diarrhœa, &c. Milk has been issued from hospital to a certain number of out-patients at my own discretion. The food during the year has been of good quality.

(d) *Removal of Excreta.*—The latrines are worked on the dry-earth system. A pint of the following solution is put into each bucket every day (half a pint when empty and half a pint when full):—Corrosive sublimate 1 in 1,000 with ten parts of chloride of sodium, the solution being coloured with methyl blue. The buckets are emptied twice daily, and the excreta burnt in the incinerator, which is acting well. 900 lb. of wood are burnt each day in the incinerator for the Boer camp alone. The urine is conveyed by underground pipes into square pits 9 feet deep and 9 feet wide : (1) the lower third of which is filled with broken bricks ; (2) middle third a layer of broken bricks and coke breeze ;

more brick than coke ; (3) upper third to within 2 feet of the surface brick and coke breeze mixed, more coke than brick. Storm water is kept out of them by entrenching around their margins and embanking on the pit side of the entrenchment. No disinfectant is placed in these, and they have answered their purpose most satisfactorily.

(e) *Ablution*.—A large ablution room has been provided in each camp with concrete flooring sloping to a central drain. Tubs and buckets are provided for washing purposes.

(f) *Dwellings*.—These consist of cadjan huts with galvanized iron roofs and concrete floors. Each hut accommodates 55 prisoners, and is 100 feet in length and 25 feet in width.

(g) *Ventilation*.—The upper portion of the side walls of the huts consist of cadjan tats, which are raised during the day, allowing thorough ventilation. All the beds and bedding are put out in the sun daily during fine weather, and clothes lines are provided for hanging out blankets, towels, clothing, &c.

(h) *Clothing*.—This is issued liberally to the prisoners of war according to requirements and medical recommendations.

(i) *Recreation*.—Quoits, shuttle alleys, carpenters' shops, music, and dancing, football, swimming baths, horizontal and parallel bars, are provided for this purpose.

(j) *Climate and Meteorology*.—The climate of Ragama is on the whole very good.

Rainfall.						
Month.		Rainfall.		Greatest Fall		No. of Days on
1901.		Inches.		any one Day.		which Rain fell.
September	...	3.96	...	1.88	...	13
October	...	6.84	...	1.74	...	16
November	...	27.44	...	5.29	...	23
December	...	2.23	...	.97	...	8
January 1902.	...	1.38	...	.52	...	7
February	...	5.17	...	3.29	...	10
March ...	...	7.67	...	2.02	...	12
April ...	...	11.48	...	3.62	...	14
May ...	...	11.22	...	3.33	...	13
June ...	...	10.78	...	1.73	...	20
July ...	...	10.15	...	1.50	...	20
August (up to 10th)	...	.75	...	.33	...	4
Maximum temperature in sun	...	...	...	...	...	15.3
Maximum in shade (dry)	...	...	...	...	...	93.8
Minimum in shade (dry)	...	...	...	...	...	71.9
Maximum in shade (wet)	...	...	...	...	...	83
Minimum in shade (wet)	...	...	...	...	...	67.5

III.—MEDICAL.

(a) *Hospital*.—There is one hospital consisting of a ward with accommodation for 20 patients. There were 115 cases treated during the year.

Daily Average of Sick in Hospital for each Month.

1901.			1902.		
September	...	7.9	March	...	4.9
October	...	9.8	April	...	5.7
November	...	8.8	May	...	5
December	...	7.1	June	...	5.7
1902.			July	...	6.4
January	...	9.6	August (up to 10th)	...	6
February	...	4.7			

The largest number in hospital on any one day was 13, the smallest 2. Percentage of sick to prisoners for the year was 3.7.

There has been one case of infectious diseases, "smallpox," imported from Hambantota by a prisoner on parole there, who returned here with the disease in its incubation stage. There were 23 mild cases of dysentery, 25 cases of ague, 1 case hydatid lung, 4 cases bronchitis, 1 case abscess liver, 1 case pleurisy treated during the year. The others treated were minor cases only. There have been no deaths and no cases of enteric.

The hospital staff consists of myself in charge, an apothecary, and nurse orderlies from among the prisoners of war, who are paid for their services.

All have performed their duties to my entire satisfaction. A few cases of incurable disease and diseases dangerous to life have been recommended for release; and others whom the climate seemed not to suit have been sent for change to other places in Ceylon.

The hospital supplies have been to my entire satisfaction. The invalid diets have been well cooked and served.

(20) REPORT of the Medical Officer, Prisoners of War Camp at Hambantota, Mr. A. Ludowyk.

General.—The prisoners of war camp at Hambantota was opened on the 19th September, 1901, when a batch of 57 prisoners of war were sent from Diyatalawa. Of this number, 32 were officers and 25 were Burghers. At the beginning of the year under review there were 57 prisoners of war in the camp. During the year there were several new arrivals from Diyatalawa and Ragama, so that in the month of April the number in camp rose to 92.

Sanitary.—The jail, which was utilised as a prisoners of war camp, is admirably situated and well adapted for the purpose. The increase in the number of prisoners of war during the year necessitated the erection of two temporary sheds of sixteen beds each. These buildings were well ventilated and supplied with an efficient system of surface drainage.

Departure of Prisoners of War and Closing of Camp.—At the time of the declaration of peace there were 57 prisoners of war in the camp. On the 18th July 50 of them left by the ss. Lady Gordon for Urugasmanhandiya. The remaining seven, who were at the time recovering from intermittent fever, were detained, as they were unfit to travel by steamer. These left Hambantota by coach on the 27th July, and from that date the camp has been closed.

[PART IV.]

<i>General.</i>	Salaries and Allowances of Government Medical Officers	122,921	89	} 181,777 75
	Exchange Compensation	...	...	...	...	...	...	2,462	23
	Nursing Service	...	...	...	...	...	...	4,898	40
	Salaries of Extra Clerks, &c.	...	...	...	...	...	...	3,270	47
	Maintenance and Repairs to Buildings	...	...	...	...	...	...	43,634	95
	Transport of Medicines and other Miscellaneous Charges	...	...	...	...	...	...	1,996	82
	Printing	...	...	...	...	...	...	2,592	99
									518,614	97

Table III.—List of Drugs, &c., supplied to Estate Dispensaries during the Year 1902.

				Rs.	c.					Rs.	c.	
Abbotsford, &c.	...	Nanu-oya	...	289	4	Lethenty	...	Hatton	...	231	86	
Agar's Land, &c.	...	Balangoda	...	430	30	Lynsted, &c.	...	Bogawantalawa	...	49	24	
Ambalawana, &c.	...	Deltota	...	452	55	Mahadova, &c.	...	Lunugala	...	311	92	
Annfield	...	Dikoya	...	311	16	Mahayaya	...	Dehiowita	...	37	80	
Attabage, &c.	...	Pussellawa	...	160	4	Mipitikanda	...	Yatiantota	...	175	27	
Arington, &c.	...	Yatiantota	...	80	0	Mocha	...	Maskeliya	...	409	46	
Avisawella, &c.	...	Avisawella	...	300	0	Mooloya, &c.	...	Kandy	...	650	30	
Bambarabotuwa, &c.	...	Ratnapura	...	607	55	Moray, &c.	...	Maskeliya	...	200	0	
Beverley, &c.	...	Morawak korale	...	556	36	Mudamana, &c.	...	Kitulgala	...	257	18	
Cabragalla, &c.	...	Koslanda	...	352	38	Nilambe	...	Deltota	...	330	30	
Campion	...	Bogawantalawa	...	269	22	North Matale, &c.	...	Matale	...	616	3	
Chesterford	...	Veyangoda	...	500	0	Norwood	...	Hatton	...	373	97	
Clodagh	...	Matale	...	428	5	Osborne, &c.	...	Hatton	...	372	69	
Clunes	...	Dehiowita	...	514	82	Pallekele, &c.	...	Kandy	...	416	0	
Cocagalla, &c.	...	Lunugala	...	327	88	Panawatta, &c.	...	Yatiantota	...	327	62	
Concordia, &c.	...	Nuwara Eliya	...	1,000	66	Pantiya	...	Neboda	...	227	48	
Condegalla, &c.	...	Ramboda	...	337	81	Penrith, &c.	...	Avisawella	...	402	64	
Daisy Valley	...	Kurunegala	...	49	64	Pitakanda, &c.	...	Kurunegala	...	275	53	
Debatgama	...	Aranayaka	...	200	0	Polatagama	...	Karawanella	...	322	72	
Degalessa, &c.	...	Karawanella	...	393	63	Queensberry, &c.	...	Kotmale	...	248	21	
Delta, &c.	...	Pussellawa	...	261	70	Ragalla, &c.	...	Kandapola	...	442	72	
Delwita	...	Kurunegala	...	378	8	Rassagala, &c.	...	Balangoda	...	499	20	
Dewalakanda	...	Dehiowita	...	151	26	Rayigama	...	Horana	...	262	80	
Diyagama	...	Agrapatana	...	308	33	Roeberry, &c.	...	Lunugala	...	290	18	
Drayton, &c.	...	Dimbula	...	303	0	Rondura Group	...	Kitulgala	...	289	30	
Duckwari	...	Rangala	...	307	68	Rookwood Group	...	Hewaheta	...	174	32	
Dunedin	...	Karawanella	...	348	90	Sapumalkanda, &c.	...	Dehiowita	...	350	0	
Dunsinane	...	Pundalu-oya	...	65	40	Sarnia, &c.	...	Badulla	...	520	60	
Eadella	...	Polgahawela	...	147	88	Spring Valley, &c.	...	Badulla	...	383	98	
East Holyrood	...	Dimbula	...	300	0	St. Leonard's, &c.	...	Nuwara Eliya	...	355	70	
Edarapola, &c.	...	Yatiantota	...	346	60	Sunnycroft, &c.	...	Veyangoda	...	683	80	
Ella	...	Karawanella	...	174	14	Tangakele, &c.	...	Lindula	...	497	86	
Elfindale, &c.	...	Watawala	...	328	98	Theresia, &c.	...	Bogawantalawa	...	439	52	
El Teb, &c.	...	Passara	...	300	0	Troy, &c.	...	Karawanella	...	425	0	
Galatura, &c.	...	Ratnapura	...	387	27	Udabage	...	Kitulgala	...	329	76	
Ganepella	...	Karawanella	...	300	0	Unugalla, &c.	...	Badulla	...	390	96	
Gikiyanakanda, &c.	...	Neboda	...	349	18	Ury, &c.	...	Passara	...	435	10	
Glassel, &c.	...	Dehiowita	...	348	66	Uva	...	Badulla	...	298	63	
Glen Alpin, &c.	...	Badulla	...	194	0	Vellai-oya, &c.	...	Watawala	...	404	0	
Glenlyon, &c.	...	Agrapatana	...	462	0	Venture Group	...	Norwood	...	380	54	
Goorookele	...	Deltota	...	350	0	Vogan, &c.	...	Neboda	...	250	0	
Halgolla, &c.	...	Yatiantota	...	300	0	Waharaka, &c.	...	Kegalla	...	46	94	
Halwatura	...	Panadure	...	502	40	Warwick, &c.	...	Ambawela	...	383	30	
Hauteville	...	Agrapatana	...	401	24	Waverly	...	Agrapatana	...	417	75	
Havilland	...	Dolosbage	...	148	62	We-oya, &c.	...	Yatiantota	...	400	0	
Hayes, &c.	...	Morawak korale	...	187	20	Westhall, &c.	...	Kotmale	...	210	59	
Helboda	...	Pussellawa	...	383	16	Weywelhena	...	Badulla	...	350	32	
Hemmingford, &c.	...	Avisawella	...	208	86	Yataderiya, &c.	...	Kegalla	...	741	50	
High Forest, &c.	...	Maturata	...	451	38	Yatawatta, &c.	...	Matale	...	400	60	
Katooloya, &c.	...	Madulkele	...	226	41	Yogama, &c.	...	Dehiowita	...	378	68	
Katugastota	...	Katugastota	...	250	0	Yoxford, &c.	...	Watagoda	...	404	18	
Knavesmire	...	Kegalla	...	225	0							
Lavant, &c.	...	Karawanella	...	427	60							
Laxapana, &c.	...	Maskeliya	...	476	98							
Lebanon, &c.	...	Madulkele	...	631	6							
										Total	...	36,628 11

	Number of Cases and Deaths.		Date of First Appearance.	Date of Last Case.	Of these													
					Sinhalese.		Moors.		Tamils.		Immigrants.		Malays.		Others.		Total.	
	Cases.	Deaths.			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
WESTERN PROVINCE.																		
Negombo.			1902.	1902.														
Negombo	36	28	Jan. 25	March 15	26	21	2	1	3	3	3	2			2	1	36	28
Kudapaduwa	1	1	Jan. 29	Jan. 29	—	—	—	—	1	1	—	—	—	—	—	—	1	1
Hunupitiya	2	2	Feb. 10	Feb. 10	—	—	2	2	—	—	—	—	—	—	—	—	2	2
Kattuwa	1	1	Feb. 12	Feb. 12	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Panadure.																		
Wadduwa	4	4	Jan. 21	Jan. 31	4	4	—	—	—	—	—	—	—	—	—	—	4	4
Egoda Uyana	9	4	Feb. 4	Feb. 22	9	4	—	—	—	—	—	—	—	—	—	—	9	4
Kalutara.																		
Mahawaskaduwa	1	1	Jan. 31	Jan. 31	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Kalutara North	1	1	March 15	March 15	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Ragama Camp	2	1	July 5	July 5	—	—	—	—	—	—	2	1	—	—	—	—	2	1
Do.	13	10	July 11	July 15	—	—	—	—	—	—	13	10	—	—	—	—	13	10
Do.	1	—	July 16	July 16	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Do.	1	1	July 20	July 20	—	—	—	—	—	—	1	1	—	—	—	—	1	1
Do.	1	1	Aug. 7	Aug. 7	—	—	—	—	—	—	1	1	—	—	—	—	1	1
Do.	1	—	Oct. 20	Oct. 20	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Total	74	55			42	32	4	3	4	4	22	15	—	—	2	1	74	55
CENTRAL PROVINCE.																		
Pallekele, Teldeniya	22	12	Oct. 12	Dec. 28	—	—	—	—	22	12	—	—	—	—	—	—	22	12
NORTHERN PROVINCE.			1901.															
Aechchuvely North	7	4	Dec. 1	Jan. 14	—	—	—	—	7	4	—	—	—	—	—	—	7	4
Kayts (including Karamben)	29	24	Dec. 11	Jan. 13	—	—	—	—	29	24	—	—	—	—	—	—	29	24
Total	36	28			—	—	—	—	36	28	—	—	—	—	—	—	36	28
SOUTHERN PROVINCE.			1902.															
Panangala	8	2	Feb. 3	March 15	8	2	—	—	—	—	—	—	—	—	—	—	8	2
Hiniduma	10	—	March 5	March 20	10	—	—	—	—	—	—	—	—	—	—	—	10	—
Udugama	1	1	March 11	March 11	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Mahapalagama	1	1	March 5	March 5	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Nagoda	1	—	March 5	March 11	1	—	—	—	—	—	—	—	—	—	—	—	1	—
Total	21	4			21	4	—	—	—	—	—	—	—	—	—	—	21	4
PROVINCE OF UVA.																		
Weywelhena estate, Badulla	1	1	Aug. 1															

Table V.—Return of Cases of Smallpox, Modified Smallpox, and Chickenpox that occurred in Ceylon during 1902, and which were reported to the Civil Medical Department.

Station.	Total treated.				Total died.			
	Small-pox.	Modified Small-pox.	Chicken-pox.	Total.	Small-pox.	Modified Small-pox.	Chicken-pox.	Total.
<i>Western Province.</i>								
Infectious Diseases Hospital, Kanatta ...	75	43	549	667	32	—	3	35
Borella Convict Hospital ...	—	—	89	89	—	—	—	—
Mahara jail ...	—	—	76	76	—	—	—	—
Hanwella ...	—	—	22	22	—	—	—	—
Negombo ...	1	1	8	10	—	—	—	—
Panadure ...	—	—	100	100	—	—	—	—
Moratuwa ...	—	2	—	2	—	—	—	—
Ja-ela ...	—	—	20	20	—	—	—	—
Neboda ...	—	—	1	1	—	—	—	—
Kalutara ...	—	—	43	43	—	—	—	—
Kadawatta ...	—	—	5	5	—	—	—	—
Aturugiriya ...	—	—	1	1	—	—	—	—
Horana ...	—	—	29	29	—	—	—	—
Veyangoda ..	—	—	23	23	—	—	—	—
Mirigama ...	—	—	10	10	—	—	—	—
Henaratgoda ...	—	—	49	49	—	—	—	—
Beruwala ...	—	—	13	13	—	—	—	—
Minuwangoda ...	—	—	19	19	—	—	—	—
Total ...	76	46	1,057	1,179	32	—	3	35
<i>Central Province.</i>								
Infectious Diseases Hospital, Kandy ...	—	—	94	94	—	—	—	—
Gampola ...	—	—	10	10	—	—	—	—
Nuwara Eliya ...	—	—	11	11	—	—	—	—
Matale ...	—	—	156	156	—	—	—	—
Dambulla ...	—	—	1	1	—	—	—	—
Galawela ...	—	—	2	2	—	—	—	—
Hanguranketa ...	—	—	98	98	—	—	—	—
Paldeniya ...	—	—	10	10	—	—	—	—
Mausahiriya ...	—	—	9	9	—	—	—	—
Dikoya ...	—	—	6	6	—	—	—	—
Lindula ...	—	—	19	19	—	—	—	—
Kelebokke ...	—	—	2	2	—	—	—	—
Maskeliya ...	—	—	9	9	—	—	—	—
Nawalapitiya ...	—	—	15	15	—	—	—	—
Teldeniya ...	—	—	2	2	—	—	—	—
Maturata ...	—	—	94	94	—	—	—	—
Dimbula ...	—	—	8	8	—	—	—	—
Elkaduwa ...	—	—	4	4	—	—	—	—
Agrapatana ...	—	—	10	10	—	—	—	—
Dolosbage ...	—	—	10	10	—	—	—	—
Rattota ...	—	—	17	17	—	—	—	—
Kotmale ...	—	—	1	1	—	—	—	—
Watagoda ...	—	—	1	1	—	—	—	—
Kadugannawa ...	—	—	9	9	—	—	—	—
Pundalu-oya ...	—	—	16	16	—	—	—	—
Nanu-oya ...	—	—	17	17	—	—	—	—
Jail Hospital, Kandy ...	—	—	15	15	—	—	—	—
Golahanwatta ...	—	—	3	3	—	—	—	—
Total ...	—	—	649	649	—	—	—	—
<i>Northern Province.</i>								
Jaffna Smallpox Hospital ...	—	1	2	3	—	—	—	—
Kankasanturai Infectious Diseases Hospital ...	1	—	1	2	—	—	—	—
Batticotta ...	—	—	3	3	—	—	—	—
Kayts ...	—	—	5	5	—	—	—	—
Delft ...	—	—	2	2	—	—	—	—
Total ...	1	1	13	15	—	—	—	—
<i>Eastern Province.</i>								
Batticaloa ...	—	—	1	1	—	—	—	—
Muttur ...	—	—	6	6	—	—	—	—
Tambalagam ...	—	—	2	2	—	—	—	—
Trincomalee ...	—	—	5	5	—	—	—	—
Kattankudy ...	—	—	1	1	—	—	—	—
Karunkoditivu ...	—	—	2	2	—	—	—	—
Total ...	—	—	17	17	—	—	—	—

Table V.—*continued.*

Station.	Total treated.				Total died.			
	Small-pox.	Modified Small-pox.	Chicken-pox.	Total.	Small-pox.	Modified Small-pox.	Chicken-pox.	Total.
<i>Southern Province.</i>								
Baddegama ...	—	—	80	80	—	—	—	—
Hambantota ...	—	—	1	1	—	—	—	—
Hakmana ...	—	—	4	4	—	—	—	—
Balapitiya ...	1	1	22	24	1	—	—	1
Akuressa ...	—	—	1	1	—	—	—	—
Weligama ...	4	9	21	34	2	—	—	2
Kolompuruwa ...	—	—	1	1	—	—	—	—
Kottegoda ...	—	—	1	1	—	—	—	—
Udugama ...	—	—	13	13	—	—	—	—
Nagoda ...	—	—	17	17	—	—	—	—
Galle ...	2	—	50	52	—	—	—	—
Elpitiya (Pituwela) ...	—	—	5	5	—	—	—	—
Batapola (Meetiyyagoda) ...	—	—	3	3	—	—	—	—
Matara ...	2	—	3	5	—	—	—	—
Total ...	9	10	222	241	3	—	—	3
<i>Province of Uva.</i>								
Bandarawela ...	—	—	16	16	—	—	—	—
Haldumnulla ...	—	—	15	15	—	—	—	—
Haputale ...	—	—	26	26	—	—	—	—
Koslanda ...	—	—	1	1	—	—	—	—
Pingarawa ...	—	—	1	1	—	—	—	—
Taldena ...	—	—	5	5	—	—	—	—
Welimada ...	—	—	9	9	—	—	—	—
Total ...	—	—	73	73	—	—	—	—
<i>North-Central Province.</i>								
Mihintale ...	—	—	1	1	—	—	—	—
Kekirawa ...	—	—	2	2	—	—	—	—
Total ...	—	—	3	3	—	—	—	—
<i>North-Western Province.</i>								
Puttalam ...	3	—	—	3	—	—	—	—
Kurunegala ...	—	—	16	16	—	—	—	—
Dodangaslanda ...	—	—	5	5	—	—	—	—
Total ...	3	—	21	24	—	—	—	—
<i>Province of Sabaragamuwa.</i>								
Karawanella ...	—	—	4	4	—	—	—	—
Kolonna ...	—	—	28	28	—	—	—	—
Kegalla ...	—	—	206	206	—	—	—	—
Total ...	—	—	238	238	—	—	—	—
Grand Total ...	89	57	2,293	2,439	35	—	—	38

Table VI.—Statement showing Particulars of Vaccination in the Island during 1902.

Province.			Primary Vaccination.						Re-vaccination.				Percentage of Successful to Total Inspected.			
			Age.			Results.				Results.						
			Infants.	Children.	Adults.	Suc-cessful.	Unsuc-cessful.	Un-known.	Total No. vacci-nated.	Suc-cessful.	Unsuc-cessful.	Un-known.	Total No. vacci-nated.	Primary Vacci-nation.	Re-vacci-nation.	
Western	...	...	768	36,149	4,368	34,426	1,691	5,168	41,285	4,278	1,206	1,540	7,024	95·31	78·00
Central	...	...	79	11,758	220	10,813	404	840	12,057	—	—	—	—	96·39	—
Northern	...	...	—	6,560	208	6,059	392	317	6,768	111	12	—	123	93·92	90·24
Southern	...	...	93	15,880	957	13,978	1,639	1,313	16,930	100	209	60	369	89·50	32·36
Eastern	...	...	56	5,958	624	5,852	647	139	6,638	7	—	—	7	90·04	100
North-Western	...	...	139	8,668	441	7,864	378	1,006	9,248	15	6	—	21	95·41	71·42
North-Central	...	...	1	3,561	175	3,291	356	90	3,737	—	—	—	—	90·23	—
Uva	...	...	96	3,246	76	3,092	53	273	3,418	—	—	—	—	98·31	—
Sabaragamuwa	...	...	—	7,357	152	6,193	323	993	7,509	—	—	—	—	95·04	—
Total	...	...	1,232	99,137	7,221	91,568	5,883	10,139	107,590	4,511	1,433	1,600	7,544	93·96	75·89
Number vaccinated on Estates by Estate Vaccinators			...	61	13,061	5,605	17,493	632	602	18,727	111	32	5	148	96·51	77·62
Number vaccinated in the District Outdoor Dispensaries			...	71	1,943	100	1,681	310	123	2,114	9	7	—	16	84·42	56·25
Number vaccinated in the Civil Outdoor Dispensaries			...	310	12,918	482	10,531	2,557	622	13,710	21	28	3	52	80·46	42·85
Grand Total			...	1,674	127,059	13,408	121,273	9,382	11,486	142,141	4,652	1,500	1,608	7,760	92·81	75·61
In 1901			...	893	134,853	16,360	126,500	10,795	14,811	152,106	7,744	2,721	3,377	13,842	92·13	73·99

Table VII.—Arrivals of Steamers, Sailing Ships, and Native Craft, with Native Traders and Immigrant Coolies, in the Port of Colombo, from January 1 to December 31, 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Steamers ...	203	207	265	113	194	214	197	210	193	210	161	208	2,375
Sailing Ships ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Native Craft ...	35	46	64	50	27	38	10	25	27	35	23	47	427
<i>Traders.</i>													
Men ...	1,650	3,299	3,889	4,985	5,332	4,965	5,623	2,455	7,005	5,401	4,996	2,540	52,140
Women ...	161	258	317	418	446	462	465	229	519	444	332	242	4,293
Children ...	73	211	293	404	385	338	314	117	398	316	353	92	3,194
Infants ...	23	54	87	116	108	128	109	65	120	112	78	45	1,045
Total ...	1,907	3,822	4,586	5,923	6,271	5,893	6,511	2,866	8,042	6,273	5,659	2,919	60,672
<i>Coolies.</i>													
Men ...	775	675	794	1,540	2,921	2,896	2,806	1,897	2,188	1,857	1,559	1,532	21,440
Women ...	215	222	241	457	1,026	1,027	1,006	684	792	610	435	467	7,182
Children ...	118	97	85	225	459	469	496	294	365	271	182	210	3,271
Infants ...	53	68	43	110	285	238	294	197	210	150	104	115	1,867
Total ...	1,161	1,062	1,163	2,332	4,691	4,630	4,602	3,072	3,555	2,888	2,280	2,324	33,760
Vessels placed in quarantine	27	31	36	44	34	32	34	41	43	51	80	32	485
Number of Cases of Smallpox sent to Hospital ...	—	1	—	—	—	—	—	—	—	—	1	—	2
Number of Cases of Smallpox isolated on Board ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Number of Cases of Chickenpox sent to Hospital ...	—	—	1	2	1	2	1	—	—	—	—	1	8
Number of Cases of Chickenpox isolated on Board ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Number of Cases of Measles sent to Hospital ...	—	—	—	—	2	—	—	2	—	—	—	1	5
Number of Cases of Measles isolated on Board ...	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Cholera.</i>													
Number sent to Hospital ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Number died on Board ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Number remaining on Board ...	—	—	—	—	—	—	—	—	—	—	—	—	—

For Tables VIII. and IX., see the Ceylon Blue Book, 1902, pages AA 37 and AA 46, Nosological Return and Return separating the Malabars from those sent in by the Police, &c.

Table X.—Return of Lepers treated in the Hospitals and Outdoor Dispensaries in the Island during 1902, excepting those treated in the Leper Asylum at Hendala and the Leper Wards at Kalmunai Hospital.

Institution.	No. treated.
<i>Western Province.</i>	
Civil Hospital, Colombo ...	9
Hendala Dispensary ...	7
Kalmara Dispensary ...	2
Neboda Dispensary ...	2
Horana Dispensary ...	2
Aturugiriya Dispensary ...	1
Kadawata Dispensary ...	1
Mutwal Dispensary ...	3
Borella Female Outdoor Dispensary ...	3
Panadura Dispensary ...	2
	32
<i>Central Province.</i>	
Katugastota Hospital ...	3
Gampola Hospital ...	2
Kandy Hospital ...	7
Dimbula Hospital ...	1
Dikoya Hospital ...	4
Maskeliya Hospital ...	3
Nawalapitiya Hospital ...	3
Ramboda Hospital ...	1
Teldeniya Dispensary ...	1
Bogawantalawa Dispensary ...	1
Gammaduwa Dispensary... ..	1
Nawalapitiya Dispensary ...	1
	28
<i>Southern Province.</i>	
Galle Hospital ...	1
Matara Hospital ...	1
Deniyaya Hospital ...	1
Galle Outdoor Dispensary ...	11
Tangalla Outdoor Dispensary ...	1
Nagoda Outdoor Dispensary ...	3
Udugama Outdoor Dispensary ...	2
	20

Institution.	No. treated.
<i>Northern Province.</i>	
Point Pedro Hospital ...	1
Point Pedro Dispensary ...	2
Kankasanturai Dispensary ...	6
	9
<i>Eastern Province.</i>	
Maha-oya Dispensary ...	1
Kattankudy Dispensary ...	1
Paddiyiruppu Dispensary ...	2
Batticaloa Dispensary ...	2
	6
<i>Province of Uva.</i>	
Badulla Hospital ...	2
Lunigala Dispensary ...	1
Koslanda Dispensary ...	1
	4
<i>Province of Sabaragamuwa.</i>	
Ratnapura Hospital ...	1
Karawanella Hospital ...	14
Balangoda Hospital ...	15
Karawanella Outdoor Dispensary ...	2
Ratnapura Outdoor Dispensary ...	2
Godakawela Outdoor Dispensary ...	2
Balangoda Outdoor Dispensary ...	4
	40
Grand Total ...	148

Table XI.—Cost of Establishment, 1902.

	Amount. Rs. c.	Total. Rs. c.
<i>Personal Emoluments</i> ...	276,158 0	
<i>Exchange Compensation</i> ...	11,179 96	
<i>Allowances.</i>		
House allowance to Assistant Principal Civil Medical Officer ...	840 0	
House allowance to Surgeon in charge, General Hospital ...	840 0	
House allowance to First Assistant Medical Storekeeper ...	120 97	
<i>Medical College.</i>		
Registrar, Medical College ...	6,000 0	
Allowance to Lecturers ...	8,892 22	
Salary of Lady Doctor ...	4,200 0	
House allowance to Lady Doctor..	600 0	
Scholarship for Female Students ...	1,000 0	
Pay of head servant ...	240 0	
Pay of carpenter and cooly ...	330 0	
Laboratory Assistant ...	480 0	
Servant, Medical Museum ...	150 0	
Female attendant, dissecting room ...	180 0	
		311,211 15
<i>Other Charges.</i>		
Remuneration to private medical practitioners ...	6,646 5	
Bookbinding, office furniture, and petty expenses ...	1,421 43	
Boatmen for Health Officer, Colombo ...	1,070 51	
Animal Vaccination, Western Province ...	4,601 65	
Do. Central Province ...	1,129 13	
Do. Southern Province ...	1,061 40	
Do. Northern Province ...	767 91	
Do. Eastern Province ...	728 61	
Subscription to Colonial Medical Library ...	500 0	
Appliances to illustrate lectures ...	4,643 36	
Prize medals, Medical College ...	94 0	
Purchase of glass almirahs, &c., for the Medical College ...	268 37	
Stationery ...	4,503 94	
Rent of Colonial Surgeon's Office, Jaffna ...	150 0	
Do. Kandy ...	785 0	
Do. Kurunegala ...	300 0	
Rent of Temple House ...	1,321 0	
Rent of Medical Officer's quarters, Chilaw ...	240 0	
Rent of Vaccine Stations, Colombo ...	2,170 0	
Horse allowance to Principal Civil Medical Officer ...	420 0	
Horse allowance to Colonial Surgeon, Western Province ...	420 0	
Carriage allowance to Chief Inspector of Vaccination, Western Province... ..	299 8	
Horse allowance to Medical Officer (Police) ...	420 0	
Relief to Medical Officers in solitary stations ...	996 78	
Travelling expenses of Medical Officers, &c., General ...	28,415 55	
Travelling expenses of Medical Officers, &c., in the Provinces ...	15,842 84	
		79,216 61
<i>Hospitals and Dispensaries</i> ...	—	722,027 53
<i>General.</i>		
Purchase of medicines and instruments ...	133,711 42	
Purchase of medicines in India ...	379 39	
Do. Ceylon ...	6,345 35	
Transport of medicines ...	9,202 58	
Articles for Civil Medical Stores ...	4,138 60	
Repairing instruments ...	40 25	
Contingencies ...	515 16	
Petty expenses ...	75 0	
		154,407 75
<i>Harbour Service.</i>		
Harbour service ...	—	800 0
Plague precautions ...	—	11,211 24
Grand Total ...	—	1,278,874 28

Table XII.—Statement of Expenditure of the several Government Hospitals, Asylums, &c., for 1902.

Hospitals, &c.	Total Number of Patients treated.	Average Daily Sick.	Diets.	Extra Articles of Diet.		Total.	Equipment.	Funeral Expenses.		Wages and Allowances of Nurses.	Wages of Dispensers, Attendants, &c.	Contin- gencies.	Total.
				Stimulants.	Other Articles.			Rs.	c.				
I.—ASYLUMS.													
Lunatic Asylum, Jawatta	—	—	53,712 5	175 50	3,891 3	57,778 58	5,596 61	85 25	—	—	12,391 88	4,308 12	80,160 44
Leper Asylum, Hendala	—	—	30,470 21	220 56	4,766 36	35,457 13	4,045 61	80 0	—	—	4,946 95	3,347 56	47,877 25
Total	—	—	84,182 26	396 6	8,657 39	93,235 71	9,642 22	165 25	—	—	17,338 83	7,655 68	128,037 69
II.—De Soysa Lying-in Home													
	—	—	2,176 52	52 40	132 8	2,361 0	1,161 83	5 80	—	—	894 0	970 38	5,393 1
III.—CIVIL HOSPITALS.													
Colombo	—	—	48,962 37	2,879 21	6,924 89	58,766 47	15,030 33	788 96	—	—	12,941 23	7,365 72	94,892 71
Seamen's, Planters', Anthonisz, Passengers', and Cargill's Wards	—	—	10,578 40	774 81	4,605 57	15,958 78	1,515 66	—	—	—	4,274 0	3,203 46	24,951 90
Lady Havelock Hospital	—	—	4,341 15	71 60	1,338 77	5,751 52	920 94	291 54	—	—	3,646 27	1,796 84	12,407 11
Negombo	—	—	3,997 71	46 74	117 89	4,162 34	450 32	219 95	—	—	1,488 0	479 99	6,800 60
Kalutara	—	—	3,877 17	24 7	154 72	4,055 96	451 60	153 50	—	—	1,463 12	443 31	6,567 49
Panadure	—	—	3,063 59	3 30	47 62	3,114 51	269 13	311 65	—	—	860 43	88 2	4,643 74
Kandy	—	—	18,620 66	294 59	2,453 38	21,368 63	3,552 71	1,198 75	—	—	5,154 12	875 49	32,149 70
Katugastota	—	—	854 45	—	—	854 45	55 0	—	—	—	606 0	87 73	1,603 18
Gampola	—	—	4,627 7	—	292 65	4,919 72	472 53	197 17	—	—	1,518 0	220 12	7,327 54
Nuwara Eliya...	—	—	5,925 39	121 8	529 99	6,576 46	959 55	267 0	—	—	1,621 0	681 20	10,105 21
Matale	—	—	6,231 54	9 30	264 53	6,505 37	818 35	239 54	—	—	1,755 30	410 4	9,728 60
Mulhalele	—	—	3,904 43	29 55	482 51	4,416 49	270 32	11 50	—	—	1,526 0	300 39	6,524 70
Mullaittivu	—	—	2,097 77	—	38 97	2,136 74	208 41	10 0	—	—	996 82	287 88	3,639 85
Vavuniya	—	—	1,978 75	4 68	27 47	2,010 90	233 87	50 0	—	—	800 90	81 49	3,177 16
Point Pedro	—	—	2,378 82	—	26 57	2,405 39	152 84	13 25	—	—	696 0	166 83	3,434 31
Mantota	—	—	1,210 75	—	85 28	1,296 3	175 96	36 0	—	—	979 16	124 39	2,611 54
Galle	—	—	10,193 91	97 36	440 29	10,731 56	1,208 70	—	—	—	2,859 76	882 69	15,682 71
Balapitiya	—	—	2,348 7	0 33	38 12	2,386 52	276 9	147 0	—	—	768 23	114 3	3,691 87
Matara	—	—	4,405 14	32 36	118 24	4,555 74	542 44	57 25	—	—	1,200 0	664 28	7,019 71
Tangalla	—	—	1,338 15	0 36	26 50	1,365 1	164 10	47 20	—	—	712 0	212 18	2,500 49
Hambantota	—	—	1,468 51	10 50	106 85	1,585 86	289 77	52 0	—	—	770 0	317 16	3,014 79
Batticaloa	—	—	1,595 85	11 25	96 73	1,703 83	300 3	72 0	—	—	1,433 0	303 36	3,812 22
Trincomalee	—	—	2,054 33	34 1	63 20	2,151 54	280 60	44 25	—	—	789 0	92 52	3,357 91
Kalmunai	—	—	3,459 71	8 89	412 30	3,880 90	555 2	30 60	—	—	1,374 0	428 45	6,268 97
Kurunegala	—	—	8,336 15	246 32	309 28	8,891 75	1,441 54	448 53	—	—	2,255 83	389 89	13,427 54
Puttalam	—	—	3,165 83	8 25	147 40	3,321 48	279 6	174 30	—	—	1,074 0	139 2	4,987 86
Marawila	—	—	4,132 84	—	73 26	4,206 10	369 25	179 50	—	—	1,015 33	129 30	5,899 48
Chilaw	—	—	1,603 76	4 94	7 61	1,616 31	85 88	80 78	—	—	756 0	94 61	2,633 58
Anuradhapura	—	—	5,009 91	28 13	47 38	5,085 42	550 15	285 0	—	—	1,238 72	146 56	7,305 85
Badulla	—	—	12,224 25	301 69	666 46	13,192 40	1,560 42	300 0	—	—	3,225 94	664 60	18,943 56
Ratnapura	—	—	4,374 63	44 0	231 14	4,649 77	644 44	152 0	—	—	1,279 1	82 70	6,807 32
Kegalla	—	—	5,907 14	23 37	402 85	6,333 36	1,029 80	433 83	—	—	1,224 0	283 30	9,304 29
Total	—	—	194,268 20	5,110 69	20,578 42	219,957 31	35,114 81	6,293 5	—	—	62,301 17	21,557 55	345,223 80

Table XII.—Statement of Expenditure of the several Government Hospitals, Asylums, &c., for 1902—*contd.*

Hospitals, &c.	Total Number of Patients treated.	Average Daily Sick.	Diets.	Extra Articles of Diet.		Total.	Equipment.	Funeral Expenses.	Wages and Allowances of Nurses.	Wages of Dispensers, Attendants, &c.	Contin- gencies.	Total.
				Stimulants.	Other Articles.							
	Rs.	c.	Rs.	Rs.	c.	Rs.	Rs.	c.	Rs.	c.	Rs.	c.
IV.—FIELD OR PARANGI HOSPITALS.												
Dandugama	—	3,188 60	0 41.	10 52	3,199 53	158 57	66 0	—	967 90	172 14	4,564 14
Nikaweratiya...	...	—	4,087 95	1 41	115 43	4,204 79	234 97	81 0	—	1,527 57	287 93	6,336 26
Alutnuwara	—	2,246 57	—	27 9	2,273 66	395 4	120 0	—	2,095 0	130 94	5,014 64
Medagama	—	3,233 14	6 14	45 7	3,284 35	211 1	120 0	—	1,475 0	80 59	5,170 95
Buttala	—	2,858 22	14 69	161 54	3,034 45	79 52	120 0	—	1,630 75	112 54	4,977 26
Kolonna	—	4,607 26	35 55	82 25	4,725 6	333 59	67 50	—	1,625 0	200 90	6,952 5
Godakawela	—	3,064 8	152 10	232 75	3,448 93	233 24	21 20	—	1,002 50	155 93	4,861 80
Mahaoya	—	980 82	5 95	51 51	1,038 28	150 15	118 66	—	2,159 55	136 96	3,603 60
Total	—	—	24,266 64	216 25	726 16	25,209 5	1,796 9	714 36	—	12,483 27	1,277 93	41,480 70
V.—IMMIGRANT HOSPITALS.												
Dambulla	—	4,069 93	37 49	356 85	4,464 27	211 31	42 0	—	900 0	191 14	5,808 72
Mannar	—	1,858 82	5 25	72 75	1,936 82	430 72	15 50	—	678 0	185 3	3,246 7
Puliyadi-irakkam	...	—	910 5	—	44 93	954 98	58 95	—	—	540 0	142 72	1,696 65
Pesalai	—	357 72	—	—	357 72	58 20	—	—	302 15	149 42	867 49
Mihintale	—	2,161 7	—	19 49	2,180 56	355 86	92 50	—	958 50	443 97	4,031 39
Total	—	—	9,357 59	42 74	494 2	9,894 35	1,115 4	150 0	—	3,378 65	1,112 28	15,650 32
VI.—Nursing Service												
VII.—Branch Hospital, Borella	...	—	—	—	67 29	1,696 24	102 49	—	38,893 24	—	69 33	38,893 24
VIII.—House of Observation, Galle	...	—	1,628 95	—	0 20	218 80	41 45	5 37	—	509 96	190 81	2,383 39
IX.—Infectious Diseases Hospital, Kanatta	...	—	218 60	—	414 51	4,129 44	756 77	186 45	—	555 50	433 59	1,006 56
Total	—	—	3,687 20	27 73	482 0	6,044 48	900 71	191 82	38,893 24	2,003 48	693 73	7,509 73
Grand Total	—	—	5,534 75	27 73	31,070 7	356,701 90	49,730 70	7,520 28	38,893 24	99,464 86	33,267 55	585,578 53

